STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING						AMENDED REPOR			
APPLIC	CATION FOR	PERMIT TO DRILL	-			1. WELL NAME and NUMBER FEDERAL 1022-27H			
2. TYPE OF WORK DRILL NEW WELL	REENTER P8	kA WELL (DEEPE	N WELL			3. FIELD OR WILD	CAT NATURAL BUTTES		
4. TYPE OF WELL Gas We	ll Coalb	ed Methane Well: NO				5. UNIT or COMMU	NITIZATION AGRE	MENT NAME	
6. NAME OF OPERATOR KERR	-MCGEE OIL & G	GAS ONSHORE, L.P.				7. OPERATOR PHO	NE 720 929-6587		
8. ADDRESS OF OPERATOR P.O	. Box 173779, D	Denver, CO, 80217				9. OPERATOR E-M/ mary.m	\IL nondragon@anadarko	.com	
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)		11. MINERAL OWNE	ERSHIP DIAN (STATE (9	FEE (iii)	12. SURFACE OWN	ERSHIP DIAN (STATE (FEE (III)	
UTU-0473 13. NAME OF SURFACE OWNER (if box 12	= 'fee')	FEDERAL IND	JAN (STATE (ree (ER PHONE (if box 1		
15. ADDRESS OF SURFACE OWNER (if box							ER E-MAIL (if box 1		
13. ADDRESS OF SORFACE OWNER (II BOX							ER E PIAIL (II DOX 1		
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')		18. INTEND TO COM MULTIPLE FORMATI YES (Submit C			NO 📵	19. SLANT VERTICAL DIRECTIONAL HORIZONTAL			
20. LOCATION OF WELL	FO	OTAGES	QTR-QTR		SECTION	TOWNSHIP	RANGE	MERIDIAN	
LOCATION AT SURFACE	1597 FI	NL 1182 FEL	SENE		27	10.0 S	22.0 E	S	
Top of Uppermost Producing Zone	1597 FI	NL 1182 FEL	SENE		27	10.0 S	22.0 E	S	
At Total Depth	1597 FI	NL 1182 FEL	SENE		27	10.0 S	22.0 E	S	
21. COUNTY UINTAH		22. DISTANCE TO N	EAREST LEASE LIN 1182	E (Fe	eet)	23. NUMBER OF AC	CRES IN DRILLING (640	JNIT	
		25. DISTANCE TO N (Applied For Drilling		AME	POOL	26. PROPOSED DEPTH MD: 8300 TVD:			
27. ELEVATION - GROUND LEVEL		28. BOND NUMBER				29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABI			
5442			WYB000291				ter permit # 43-8496		
		Αī	TTACHMENTS						
VERIFY THE FOLLOWING	ARE ATTACH	ED IN ACCORCAN	CE WITH THE UT	ГАН (OIL AND (GAS CONSERVATI	ON GENERAL RU	LES	
WELL PLAT OR MAP PREPARED BY	LICENSED SUR	VEYOR OR ENGINEER	R	IPLET	E DRILLING	PLAN			
AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)				FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER					
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY TOPOGRAPHICAL MAP									
NAME Kevin McIntyre TITLE Regulatory Analyst I PHONE 7			PHONE 72	0 929-6226					
SIGNATURE DATE 09/15/2008 EMAIL Ke				vin.McIntyre@anadarl	co.com				
API NUMBER ASSIGNED APPROVAL ASSIGNED APPROVAL									

Permit Manager

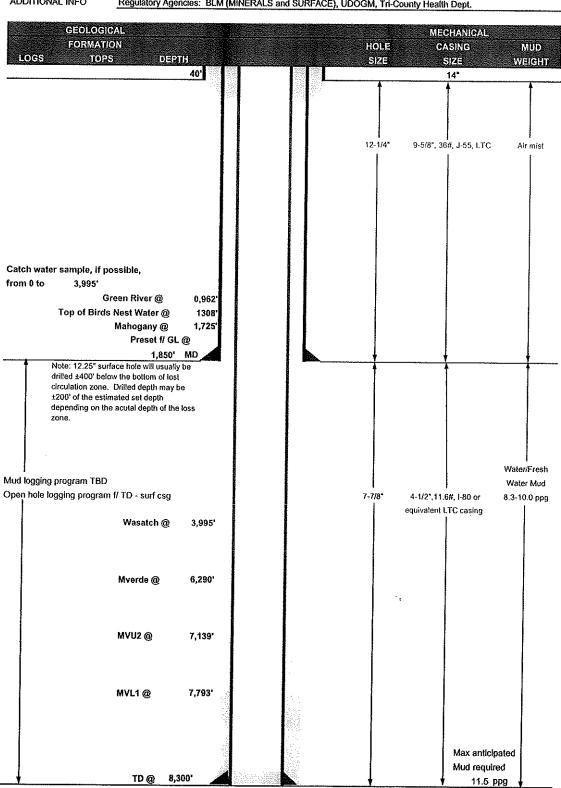
		Proposed Ho	ole, Casing, and Cement			
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)		
Prod	7.875	4.5	0	8300		
Pipe	Grade	Length	Weight			
	Grade I-80 LT&C	8300	11.6			
	Cement Interval	Top (MD)	Bottom (MD)			
		0	8300			
		Cement Description	Class	Sacks	Yield	Weight
			Premium Lite High Strength	380	3.38	11.0
			Pozzuolanic Cement	1350	1.31	14.3

Proposed Hole, Casing, and Cement							
String	Hole Size	Casing Size	Top (MD)	Bottom (MD)			
Surf	12.25	9.625	0	1850			
Pipe	Grade	Length	Weight				
	Grade J-55 LT&C	1850	36.0				
	Cement Interval	Top (MD)	Bottom (MD)				
		0	1850				
		Cement Description	Class	Sacks	Yield	Weight	
			Premium Foamed Cement	215	1.18	15.6	
			Premium Foamed Cement	50	1.18	15.6	



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPAN'	YNAME _	KERR-McGEE	OIL & GAS C	NSHORE LP		DATE	August 2	3, 2008			
WELL NA	ME _	Federal 10:	22-27H			TD	8,300'	MD/TVD			
FIELD	Natural Butte	S	COUNTY Uit	ntah ST/	ATE Utai	h	ELEVATION	5,442'	GL	KE	5,457'
SURFACE	LOCATION	SENE 1597	'FNL & 1182'	FEL, SEC.27,	T10S, R2	2E	-			BHL	Straight Hole
		Latitude:	39.922728	Longitude:	-109.420	0058		NAD 27			
OBJECTIV	/E ZONE(S)	Wasatch/M	esaverde								
ADDITION	IAL INFO	Regulatory	Agencies: BL	M (MINERALS	and SUR	FACE),	UDOGM, Tri-C	County Healt	h Dep	t.	



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	APPLICATION AND ADMINISTRATION OF THE PARTY						DESIGN FACT	ORS
	SIZE	INTERVAL	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"	0-40'						
						3520	2020	453000
SURFACE	9-5/8*	0 to 1850	36.00	J-55	LTC	1.12	2.33	8.66
						7780	6350	201000
PRODUCTION	4-1/2"	0 to 8300	11.60	i-80	LTC	2.48	1.28	2.39
			ĺ				, i	

¹⁾ Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point)

(Burst Assumptions: TD = 11.5 ppg)

.22 psi/ft = gradient for partially evac wellbore

(Collapse Assumption: Fully Evacuated Casing, Max MW)

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 3320 psi

CEMENT PROGRAM

		1		s nonetracionamientos		
	FIT. OF FILE	DESCRIPTION	SACKS	##X(6)#\$(\$)	WEIGHT	Alero
SURFACE LE	AD 500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1		+ .25 pps flocele	·	1 to 1		·
TOP OUT CM	(1 200	20 gals sodium silicate + Premium cmt	50		15.60	1.18
		+ 2% CaCl + .25 pps flocele		Antaling		SAME NO.
TOP OUT CM	(2 as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to su	ırface, opt	ion 2 will b	e utilized	
Option 2 LE	1500	Prem cmt + 16% Gel + 10 pps gilsonite	170	35%	11.00	3.82
	1,550,67	+,25 pps Flocele + 3% salt BWOC	Address Co.		and the second of the second o	
T.	uL 500	Premium cmt + 2% CaCl	180	35%	15.60	1.18
		+ .25 pps flocele				W. C. (S. (S. (S. (S. (S. (S. (S. (S. (S. (S
TOP OUT C	as required	Premium cmt + 2% CaCl	as req.	,,,,,	15.60	1.18
PRODUCTION LE	3,490	Premium Lite II + 3% KCl + 0.25 pps	380	60%	11.00	3.38
		celloflake + 5 pps gilsonite + 10% gel				
		+ 0.5% extender				
				NATION.		The Parkets
TA	ŧ. 4,810¹	50/50 Poz/G + 10% salt + 2% get	1350	60%	14.30	1.31
		+.1%R-3	WAS:		44.55	医抗性性囊肿

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.						
PRODUCTION	Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.						

ADDITIONAL INFORMATION

rest casing nead to 750 psr after installing.	i est surface casing	g to 1,500 p:	si prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. Test to 5,000 psi (annular to 2,500 psi) prior to drilling out. Record on chart recorder & tour sheet. Function test rams on each trip. Maintain safety valve & inside BOP on rig floor at all times. Kelly to be equipped with upper

Drop Totco surveys every 2000'. Maximum allowable hole angle is 5 degrees.

Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utilifized.

DRILLING ENGINEER:		DATE:
	Brad Laney	
DRILLING SUPERINTENDENT:		DATE:
	Randy Rayna Federal 1022-27H vic	

²⁾ MASP (Prod Casing) = Pore Pressure at TD - (.22 psl/ft-partial evac gradient x TD)

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

Federal 1022-27H SENE Sec. 27, T10S,R22E UINTAH COUNTY, UTAH UTU-0473

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. <u>Estimated Tops of Important Geologic Markers:</u>

<u>Formation</u>	<u>Depth</u>
Uinta	0- Surface
Green River	962'
Bird's Nest	1308'
Mahogany	1725'
Wasatch	3995'
Mesaverde	6290'
MVU2	7139'
MVL1	7793'
TD	8300'

2. <u>Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:</u>

Substance	<u>Formation</u>	<u>Depth</u>
	Green River	962'
	Bird's Nest	1308'
	Mahogany	1725'
Gas	Wasatch	3995'
Gas	Mesaverde	6290'
Gas	MVU2	7139'
Gas	MVL1	7793'
Water	N/A	
Other Minerals	N/A	

3. <u>Pressure Control Equipment</u> (Schematic Attached)

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

4. **Proposed Casing & Cementing Program:**

Please see the Natural Buttes Unit SOP.

5. <u>Drilling Fluids Program:</u>

Please see the Natural Buttes Unit SOP.

6. <u>Evaluation Program</u>:

Please see the Natural Buttes Unit SOP.

7. Abnormal Conditions:

Maximum anticipated bottomhole pressure calculated at 8300' TD, approximately equals 5146 psi (calculated at 0.62 psi/foot).

Maximum anticipated surface pressure equals approximately 3320 psi (bottomhole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot).

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please see Natural Buttes Unit SOP Onshore Order #2 – Air Drilling Variance Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12-1/4 inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped

and replaced with a 12-1/4 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 9-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements

The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements

Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling

operation does not encounter productive formations.

Conclusion

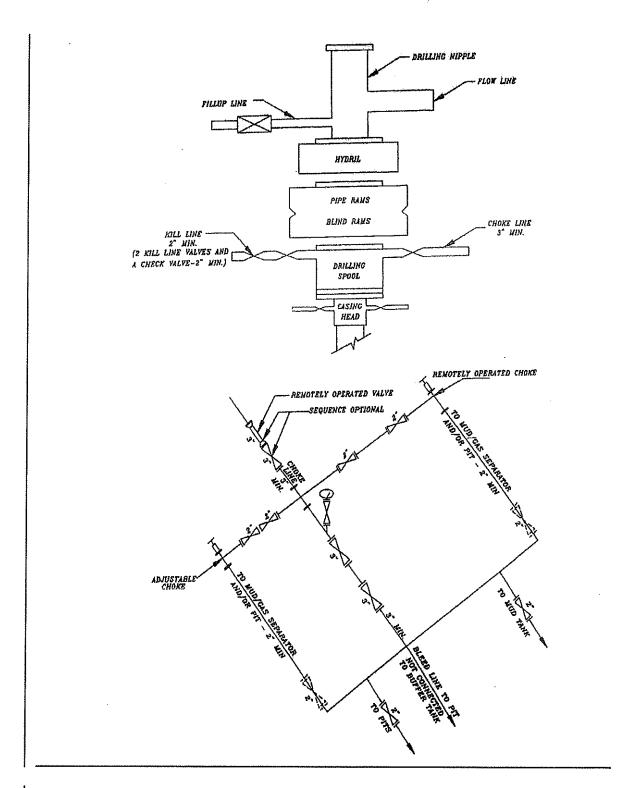
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above..

10. Other Information:

Please see Natural Buttes Unit SOP.

Federal 1022-27H

EXHIBIT A



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

Federal 1022-27H SENE Sec. 27,T10S,R22E UINTAH COUNTY, UTAH UTU-0473

ONSHORE ORDER NO. 1

MULTI-POINT SURFACE USE & OPERATIONS PLAN

1. Existing Roads:

Refer to the attached location directions.

Refer to Topo Maps A and B for location of access roads within a 2-mile radius.

2. Planned Access Roads:

Approximately 0.15 mi. +/- of new access road is proposed. Refer to Topo Map B.

Existence of pipelines; maximum grade; turnouts; major cut and fills, culverts, or bridges; gates, cattle guards, fence cuts, or modifications to existing facilities were determined at the on-site.

The access road was centerline flagged during time of staking.

Please see the Natural Buttes Unit Standard Operating Procedure (SOP).

3. Location of Existing Wells Within a 1-Mile Radius:

Please refer to Topo Map C.

4. <u>Location of Existing & Proposed Facilities</u>:

Please see the Natural Buttes Unit SOP.

Refer to Topo Map D for the location of the proposed pipelines.

A 751' rights-of-way will be required. Approximately 751' of 4" steel pipeline is proposed from the location to the tie-in point in Section 27, T10S, R22E. Please refer to the Topo Map D. The pipeline will be constructed utilizing existing rights were possible and pulled into place using a rubber tired tractor. The pipeline will be butt-welded together.

Federal 1022-27H

Variances to Best Management Practices (BMPs) Requested:

Approximately 751' of 4" steel pipeline will be installed on surface within the access corridor for the well location. As a Best Management Practice (BMP), the pipeline would be buried within the access road corridor if possible. The construction of pipelines requires the corridor of 30 feet.

This exception to the BMP should be granted by the BLM Authorized Officer because indurated bedrock, such as sandstone, is at or within 2 feet of the surface and the soil has a poor history for successful rehabilitation.

All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) will be excluded. The requested color is Carlsbad Canyon Brown (2.5Y 6/2), a non-reflective earthtone.

Interim Surface Reclamation Plan:

This exception is requested due to the current twin and multi-well program. If determined that this well will not be a candidate for either twinning &/or multi-well the operator shall spread the topsoil pile on the location up to the rig anchor points. The location will be reshaped to the original contour to the extent possible. The operator will reseed the area using the BLM recommended seed mixture and reclamation methods.

5. **Location and Type of Water Supply:**

Please see the Natural Buttes SOP.

6. **Source of Construction Materials:**

Please see the Natural Buttes SOP.

7. **Methods of Handling Waste Materials:**

Please see the Natural Buttes SOP.

A plastic reinforced liner is to be used as discussed during on-site inspection. It will be a minimum of 40 mil doublefelt, with sufficient bedding used to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash or scrap that could puncture the liner will be disposed of in the pit.

Any produced water from the proposed well will be contained in a water tank and will then be hauled by truck to one of the pre-approved disposal sites: RNI, Sec. 5, T9S, R22E, NBU #159, Sec. 35, T9S R21E, Ace Oilfield, Sec. 2, T6S, R20E, MC&MC, Sec. 12, T6S, R19E, Pipeline Facility Sec. 36, T9S, R20E, Goat Pasture Evaporation Pond SW/4 Sec. 16, T10S, R22E, Bonanza Evaporation Pond Sec. 2, T10S, R23E (Request is in lieu of filing Form 3160-5, after initial production).

8. **Ancillary Facilities:**

Please see the Natural Buttes SOP.

9. Well Site Layout: (See Location Layout Diagram)

The attached Location Layout Diagram describes drill pad cross-sections, cuts and fills, and locations of the mud tanks, reserve pit, flare pit, pipe racks, trailer parking, spoil dirt stockpile(s), and surface material stockpile(s).

Please see the attached diagram to describe rig orientation, parking areas, and access roads.

Location size may change prior to the drilling of the well due to the current rig availability. If the proposed location is not large enough to accommodate the drilling rig. The location will be resurveyed and a form 3160-5 will be submitted.

10. Plans for Reclamation of the Surface:

Please see the Natural Buttes SOP.

upon reclamation of the pit the following seed mixture will be used. A total of 12 lbs/acre will be used if the seeds are drilled (24 lbs/acre if the seeds are broadcast). The per acre requirements for *drilled* seed are:

Shadscale	8 lbs
Black Sagebrush	8 lbs
Galleta Grass	4 lbs
Indian Ricegrass	4 lbs.
Needle and Thread Grass	4 lbs.

Operator shall call the BLM for the seed mixture when final reclamation occurs.

11. Surface/Mineral Ownership:

United States of America Bureau of Land Management 170 South 500 East Vernal, UT 84078 (435)781-4400

12. <u>Stipulations/Notices/Mitigation:</u>

Red Tail Hawk Restriction - No construction March 15th to August 15th

Low profile tanks will be required (shadow gray color).

Proximity to creeks, ponds, or lakes: Bitter Creek.

13. Other Information:

A Class III archaeological survey and a paleontological survey have been performed and will be submitted.

This location is not within 460' from the boundary of the Natural Buttes Unit, nor is it within 460' of any non-committed tract lying within the boundaries of the Unit.

13. <u>Lessee's or Operator's Representative & Certification</u>:

Kevin McIntyre Regulatory Analyst I Kerr-McGee Oil & Gas Onshore LP P.O. Box 173779 Denver, CO 80217-3779 (720) 929-6226 Randy Bayne Drilling Manager Kerr-McGee Oil & Gas Onshore LP 1368 South 1200 East Vernal, UT 84078 (435) 781-7018

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under the terms and conditions of the lease for the operations conducted upon leased lands.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond #WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by the Operator, its contractors, and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Kevin McIntyre 8/23/2008

Date

Kerr-McGee Oil & Gas Onshore LP FEDERAL #1022-27H SECTION 27, T10S, R22E, S.L.B.&M.

PROCEED IN A WESTERLY DIRECTION FROM VERNAL, UTAH ALONG U.S. HIGHWAY 40 APPROXIMATELY 14.0 MILES TO THE JUNCTION OF STATE HIGHWAY 88; EXIT LEFT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 17.0 MILES TO OURAY, UTAH; PROCEED IN A SOUTHERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 11.2 MILES ON THE SEEP RIDGE ROAD TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST: TURN LEFT AND PROCEED IN AN EASTERLY. THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 9.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE EAST; TURN LEFT AND PROCEED IN AN EASTERLY, THEN SOUTHEASTERLY DIRECTION APPROXIMATELY 1.2 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHEAST; TURN LEFT AND PROCEED IN A NORTHEASTERLY DIRECTION APPROXIMATELY 1.8 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTH: TURN RIGHT AND PROCEED IN A SOUTHERLY DIRECTION APPROXIMATELY 0.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE SOUTHEAST; TURN LEFT AND PROCEED IN A SOUTHEASTERLY, THEN EASTERLY, THEN NORTHEASTERLY DIRECTION APPROXIMATELY 1.3 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN LEFT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 0.1 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY DIRECTION APPROXIMATELY 0.6 MILES TO THE BEGINNING OF THE PROPOSED ACCESS FOR THE #1022-26D TO THE SOUTHWEST; FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 180' TO THE PROPOSED #1022-26D AND THE BEGINNING OF THE PROPOSED ACCESS FOR THE #1022-27A TO THE SOUTHWEST: **FOLLOW** ROAD **FLAGS** IN SOUTHWESTERLY A DIRECTION APPROXIMATELY 0.2 MILES TO THE PROPOSED #1022-27A AND THE BEGINNING OF THE PROPOSED ACCESS TO THE SOUTHWEST: FOLLOW ROAD FLAGS IN A SOUTHWESTERLY DIRECTION APPROXIMATELY 0.15 MILES TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM VERNAL, UTAH TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 57.25 MILES.

Kerr-McGee Oil & Gas Onshore LP

FEDERAL #1022-27H

LOCATED IN UINTAH COUNTY, UTAH SECTION 27, T10S, R22E, S.L.B.&M.

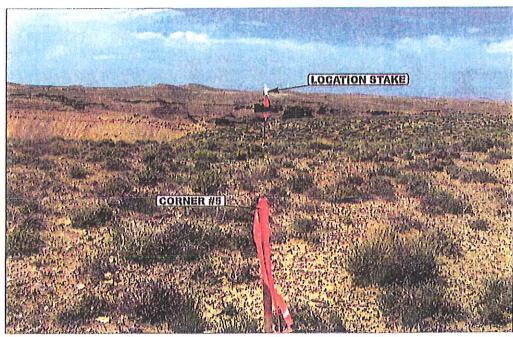


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: NORTHWESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHWESTERLY



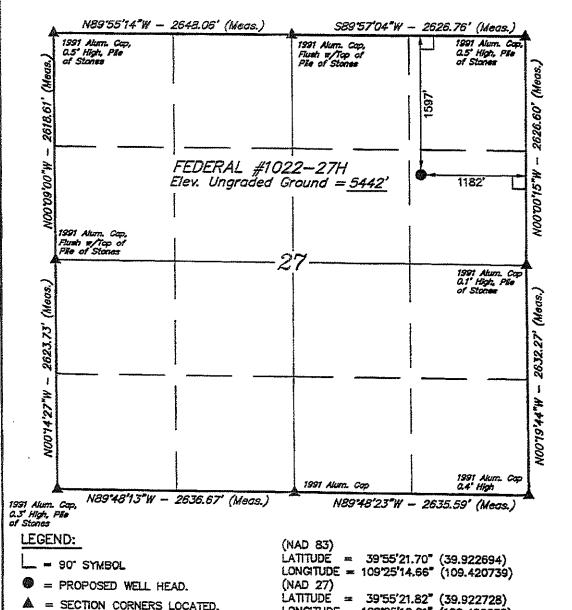
Uintah Engineering & Land Surveying 85 South 200 East Vernal, Utah 84078 435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

MONTH DAY

TAKEN BY: L.K. | DRAWN BY: C.P. | REVISED: 00-00-00

T10S, R22E, S.L.B.&M.



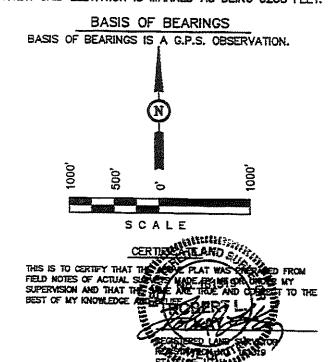
LONGITUDE = 109"25"12.21" (109,420058)

Kerr-McGee Oil & Gas Onshore LP

Well location, FEDERAL #1022-27H, located as shown in the SE 1/4 NE 1/4 of Section 27, T10S, R22E, S.L.B.&M., Uintah County, Utah.

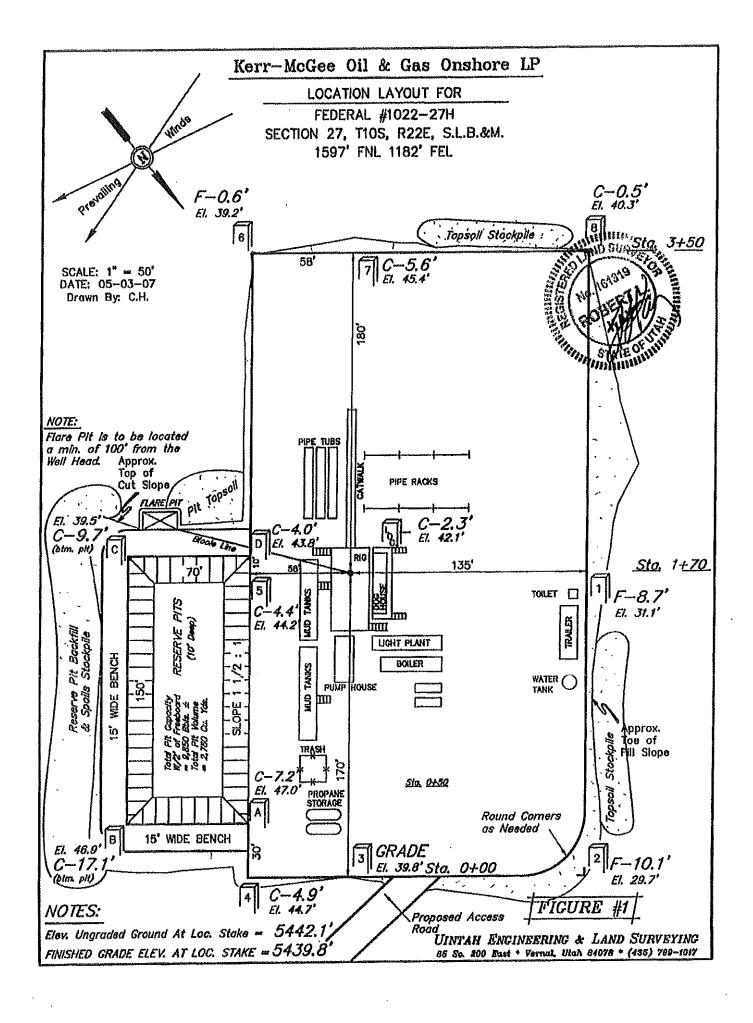
BASIS OF ELEVATION

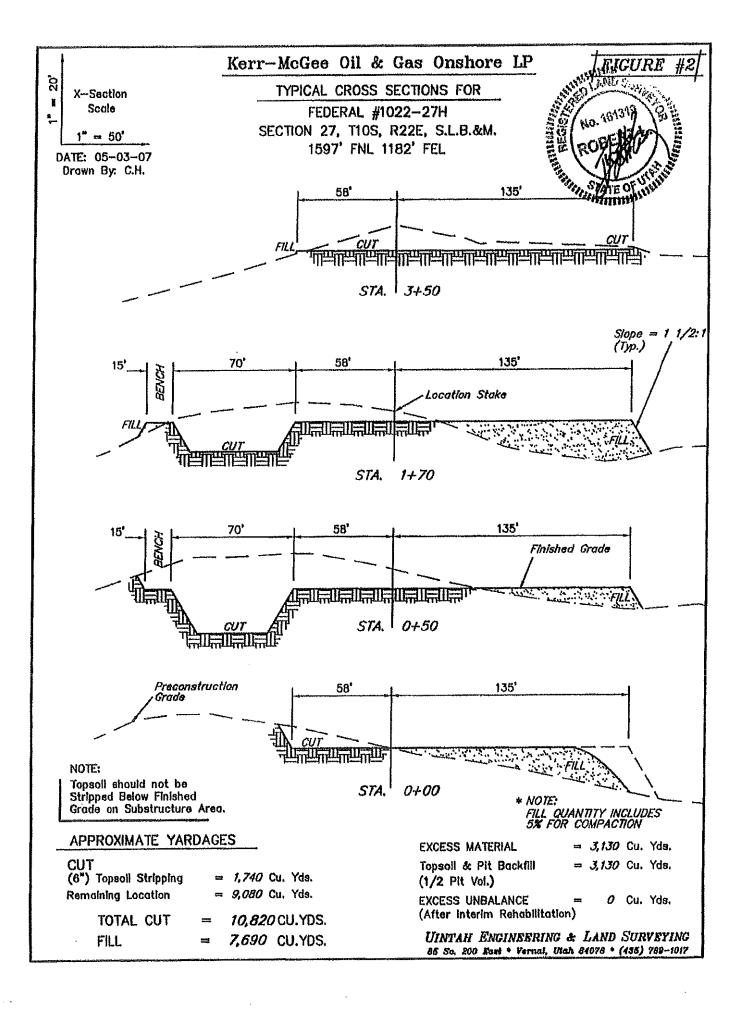
TWO WATER TRIANGULATION STATION LOCATED IN THE NW 1/4 OF SECTION 1, T10S, R21E, S.L.B.&M. TAKEN FROM THE BIG PACK MTN NE QUADRANGLE, UTAH, UINTAH COUNTY, 7.5 MINUTE SERIES (TOPOGRAPHICAL MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 5238 FEET.



Uintah Engineering & Land Surveying 85 SOUTH 200 EAST - VERNAL, UTAH 84078 (435) 789-1017

SCALE 1" == 1000"		DATE SURVEYED: 04-30-07	DATE DRAWN: 05-03-07
PARTY LK. J.A.	C.H.	REFERENCES G.L.O. PLA	T
WEATHER WARM	FILI Ke	_	Gas Onshore I P





Kerr-McGee Oil & Gas Onshore LP

FEDERAL #1022-27H
PIPELINE ALIGNMENT
LOCATED IN UINTAH COUNTY, UTAH
SECTION 27, T10S, R22E, S.L.B.&M.

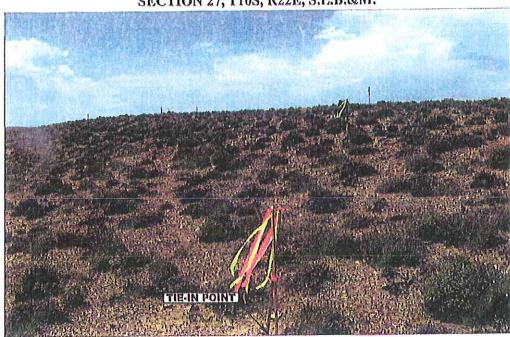


PHOTO: VIEW OF TIE-IN POINT

CAMERA ANGLE: SOUTHWESTERLY

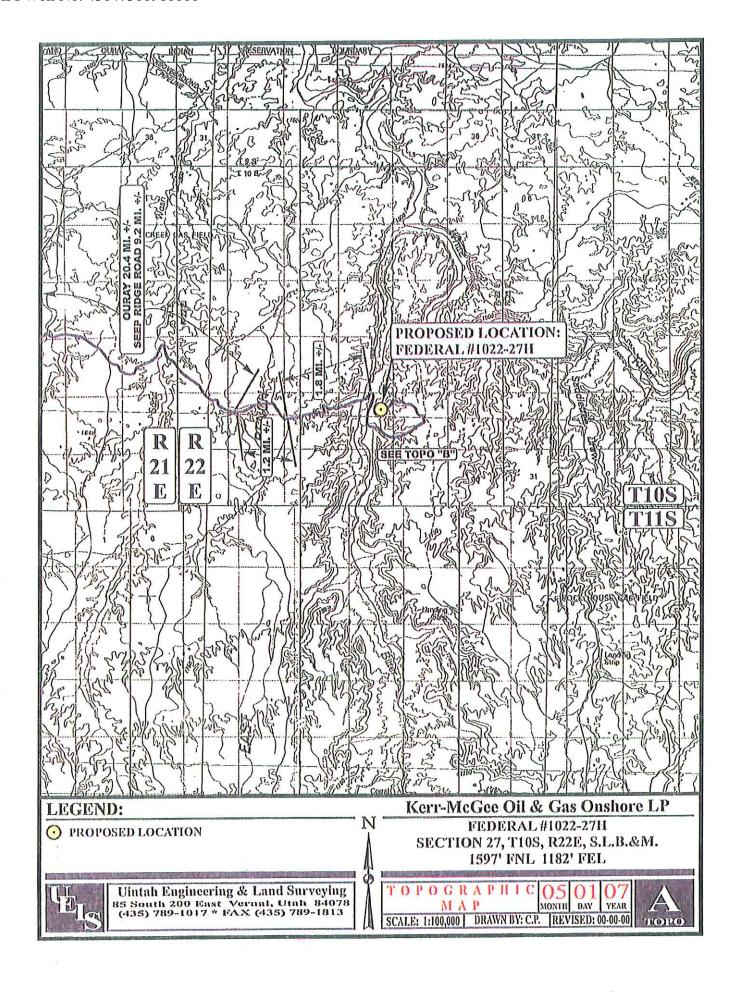


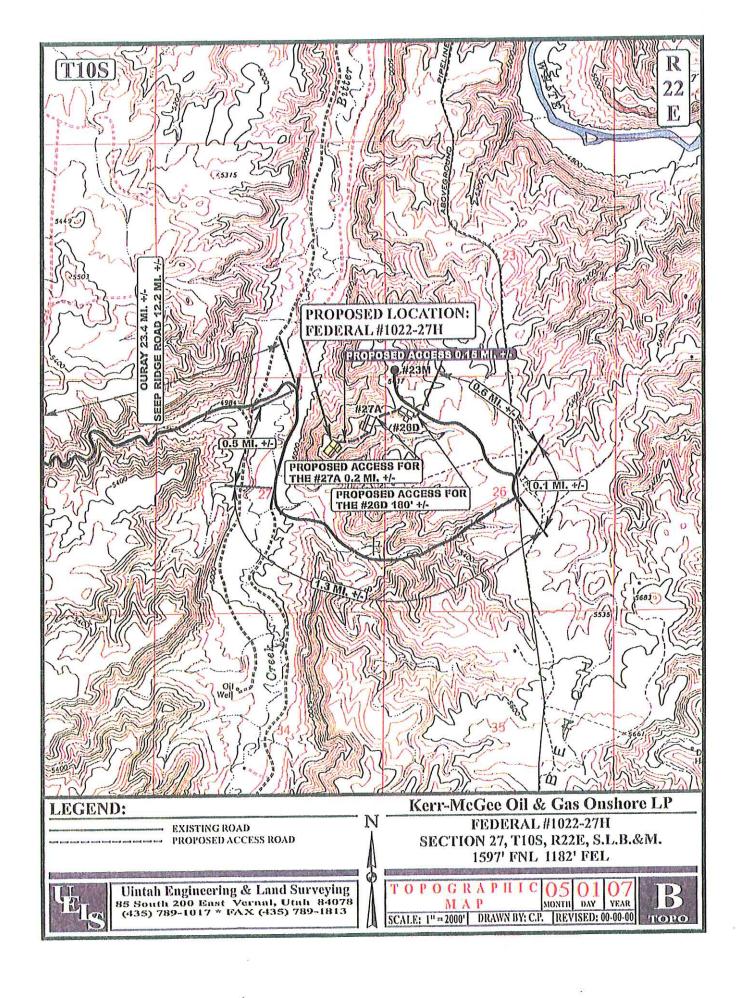
PHOTO: VIEW OF PIPELINE ALIGNMENT

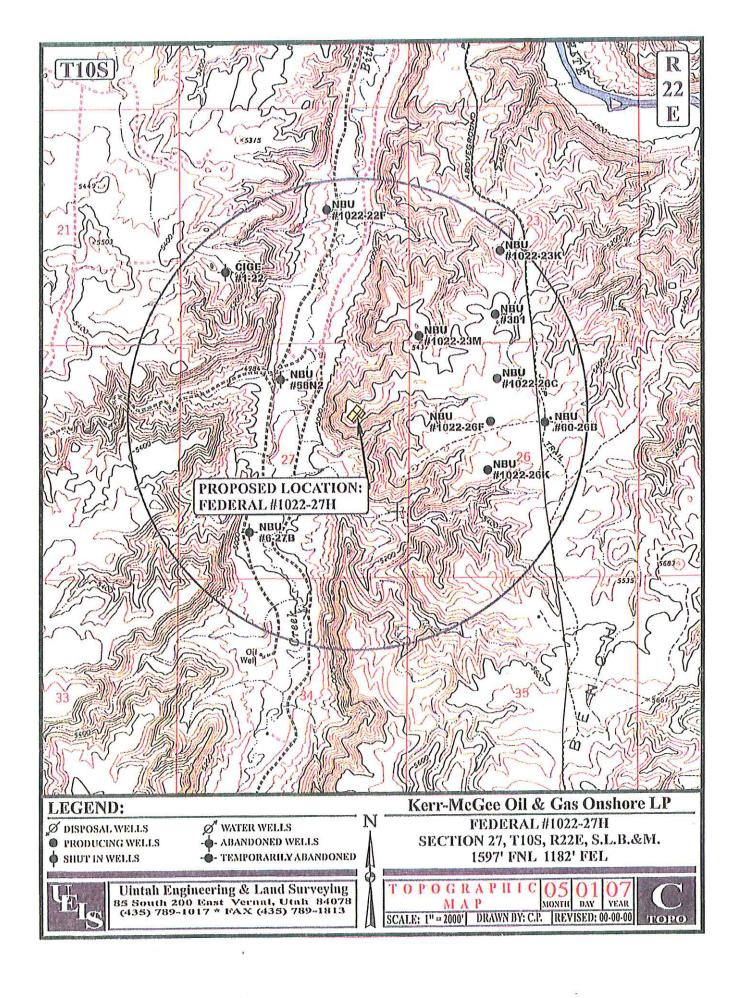
CAMERA ANGLE: WESTERLY

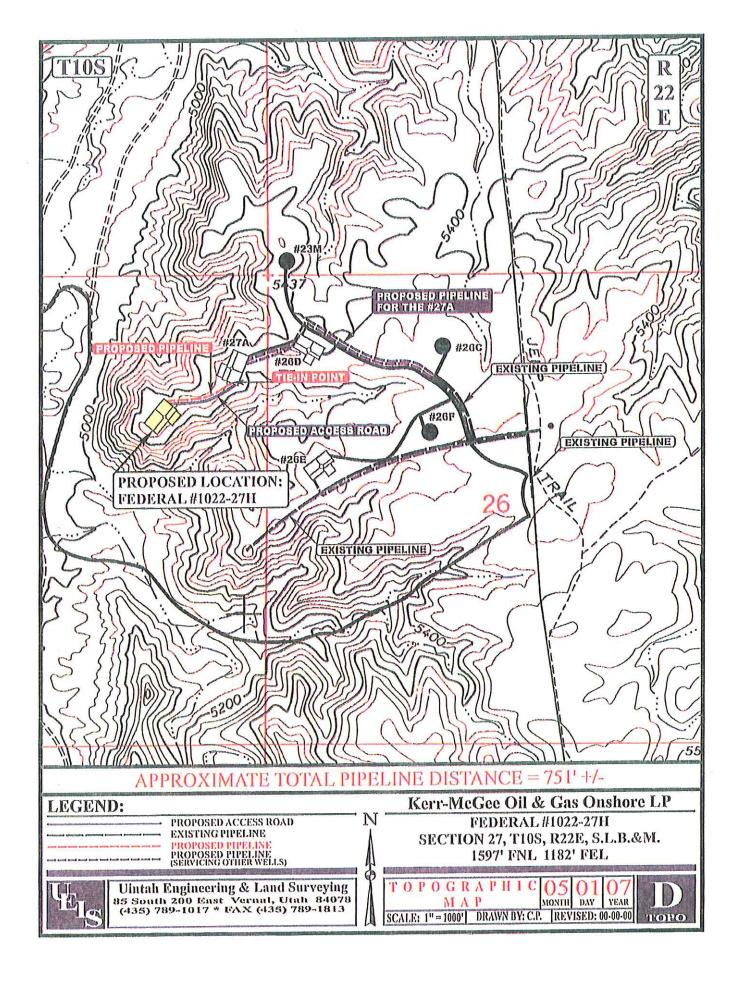


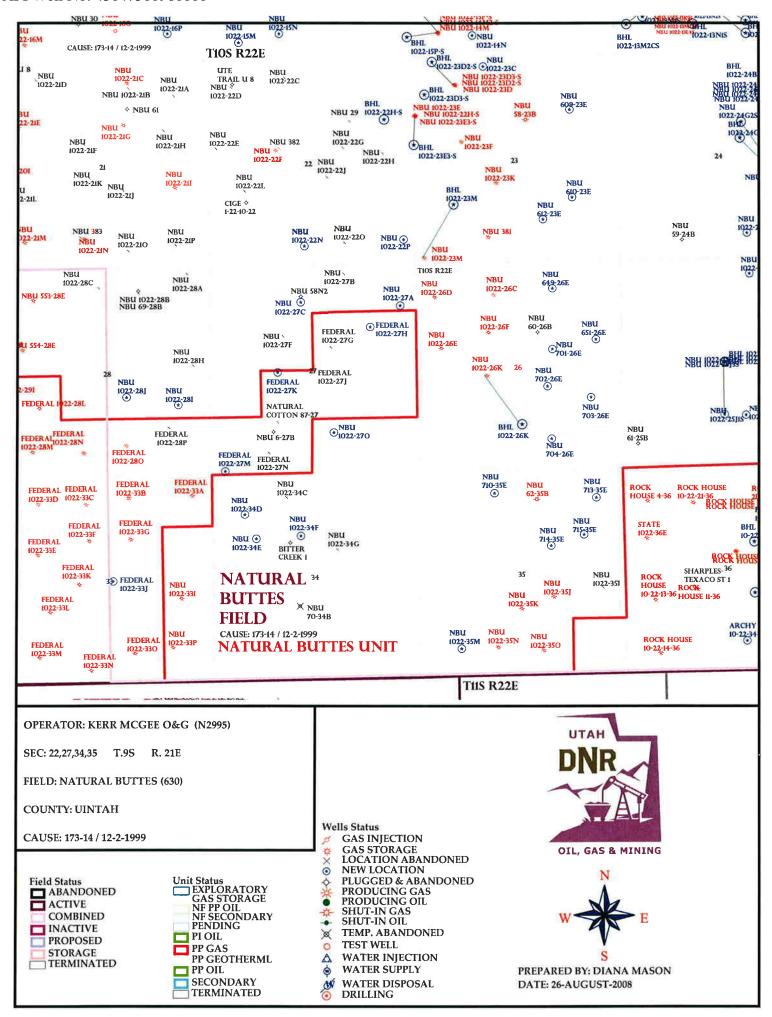






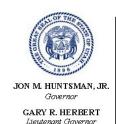






WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED:	8/23/2008	API NO. ASSIGNED: 43047500960000				
WELL NAME:	Federal 1022-27H					
OPERATOR:	KERR-MCGEE OIL & GAS ONSH	HORE, L.P. (N2995) PHONE NUMBER: 720 929-6226				
CONTACT:	Kevin McIntyre					
PROPOSED LOCATION:	SENE 27 100S 220E	Permit Tech Review: 🗾				
SURFACE:	1597 FNL 1182 FEL	Engineering Review:				
воттом:	1597 FNL 1182 FEL	Geology Review: 🖊				
COUNTY:	UINTAH					
LATITUDE:		LONGITUDE: -109.41998				
UTM SURF EASTINGS:		NORTHINGS: 4420169.00				
	NATURAL BUTTES					
LEASE TYPE:	1 - Federal					
LEASE NUMBER:	UTU-0473	PROPOSED FORMATION: WSMVD				
SURFACE OWNER:	1 - Federal	COALBED METHANE: NO				
DECEMENT AND AND ADDRESS		LOCATION AND CITYING				
RECEIVED AND/OR REVI	EWED:	LOCATION AND SITING:				
<u></u> PLAT		R649-2-3.				
▶ Bond: FEDERAL - WY	3000291	Unit:				
Potash		R649-3-2. General				
☑ Oil Shale 190-5						
Oil Shale 190-3		R649-3-3. Exception				
Oil Shale 190-13		✓ Drilling Unit				
✓ Water Permit: Water	permit # 43-8496	Board Cause No: 173-14				
RDCC Review:		Effective Date: 12/22/1999				
Fee Surface Agreem	ent	Siting: 460' fr u bdry & uncomm. tract				
Intent to Commingle	e	R649-3-11. Directional Drill				
Comments: Presite 0	Completed					
Stipulations: 4 - Fed	leral Approval - dmason					



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: FEDERAL 1022-27H **API Well Number:** 43047500960000

Lease Number: UTU-0473 **Surface Owner:** FEDERAL **Approval Date:** 9/15/2008

Issued to:

KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of CAUSE: 173-14.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

Notification Requirements:

Notify the Division with 24 hours of spudding the well.

• Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

• Contact Dustin Doucet at (801) 538-5281 office (801) 733-0983 home

Reporting Requirements:

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

Approved By:

Gil Hunt

Associate Director, Oil & Gas

Die Hut

	FORM 9						
	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0473						
SUND	RY NOTICES AND REPORTS (ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:				
Do not use this form for propo bottom-hole depth, reenter plu DRILL form for such proposals	sals to drill new wells, significantly deepen e ugged wells, or to drill horizontal laterals. Use	xisting wells below current e APPLICATION FOR PERMIT TO	7.UNIT or CA AGREEMENT NAME:				
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: FEDERAL 1022-27H				
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047500960000				
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	street, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES				
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1597 FNL 1182 FEL			COUNTY: UINTAH				
QTR/QTR, SECTION, TOWNSH	IP, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian: S		STATE: UTAH				
11. CHE	CK APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPORT,	OR OTHER DATA				
TYPE OF SUBMISSION		TYPE OF ACTION					
	ACIDIZE	ALTER CASING	CASING REPAIR				
NOTICE OF INTENT Approximate date work will start: 9/7/2009	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME				
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE				
SUBSEQUENT REPORT Date of Work Completion:		FRACTURE TREAT	☐ NEW CONSTRUCTION				
	☐ PRODUCTION START OR RESUME	☐ PLUG AND ABANDON ☐ RECLAMATION OF WELL SITE	☐ PLUG BACK ☐ RECOMPLETE DIFFERENT FORMATION				
SPUD REPORT Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON				
Date of Spau.	U TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL				
DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	✓ APD EXTENSION				
Report Date:		OTHER	OTHER:				
12 PEGGPTPE PROPOSED OR GO							
Kerr-McGee Oil & G extension to this A	ompleted operations. Clearly show all pertings as Onshore, L.P. (Kerr-McGee) PD for the maximum time allow With any questions and/or comr	respectfully requests an ved. Please contact the	Approved by the Utah Division of Oil, Gas and Mining				
		D	ate: September 03, 2009				
By: Lagyill							
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst					
SIGNATURE	. 20 525 0130	DATE					
N/A		9/3/2009					



The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43047500960000

API: 43047500960000 **Well Name:** FEDERAL 1022-27H

Location: 1597 FNL 1182 FEL QTR SENE SEC 27 TWNP 100S RNG 220E MER S

Company Permit Issued to: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Date Original Permit Issued: 9/15/2008

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

 If located on private land, has the ownership changed, if so, has the surface agreement been updated? (m) Yes (m) No · Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?
Yes
No Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? (Yes (No · Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location? 📗 Yes 📵 No Has the approved source of water for drilling changed?

Yes Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? (ii) Yes (iii) No Approved by the • Is bonding still in place, which covers this proposed well? Yes 📖 No Utah Division of Oil, Gas and Mining

Signature: Danielle Piernot **Date:** 9/3/2009

Title: Regulatory Analyst Representing: KERR-MCGEE OIL & GAS ONSHOR September 03, 2009

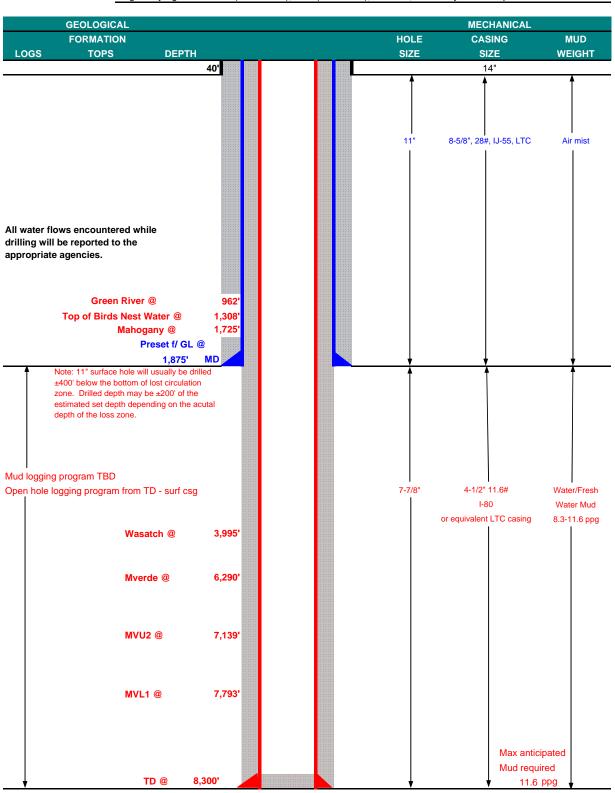
Bv:

	FORM 9					
	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0473					
	RY NOTICES AND REPORTS OF		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
	sals to drill new wells, significantly deepen exisugged wells, or to drill horizontal laterals. Use <i>i</i>		7.UNIT or CA AGREEMENT NAME:			
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: FEDERAL 1022-27H			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047500960000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	treet, Suite 600, Denver, CO, 80217 3779	PHONE NUMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1597 FNL 1182 FEL			COUNTY: UINTAH			
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SENE Section: 27	IP, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian: S		STATE: UTAH			
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	NATURE OF NOTICE, REPORT,	OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
	☐ ACIDIZE ✓	ALTER CASING	CASING REPAIR			
✓ NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME			
5/17/2010	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	■ NEW CONSTRUCTION			
Date of Work Completion:	OPERATOR CHANGE	PLUG AND ABANDON	☐ PLUG BACK			
	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION ☐	SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON			
	☐ TUBING REPAIR ☐	VENT OR FLARE	☐ WATER DISPOSAL			
DRILLING REPORT Report Date:	☐ WATER SHUTOFF ☐	SI TA STATUS EXTENSION	APD EXTENSION			
Report Date.	□ WILDCAT WELL DETERMINATION □	OTHER	OTHER:			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. Kerr-McGee Oil & Gas Onshore LP (Kerr-McGee) respectfully requests to change the surface casing size for this well from FROM: 9-5/8" TO: 8-5/8" due to a revised drilling procedure. The production casing will still be cemented it's entire length to the surface. Please see the attached drilling program for additional details. All other information remains the same. Please contact the undersigned with any questions and/or comments. Thank yo (May 11, 2010) By:						
NAME (PLEASE PRINT) Danielle Piernot	PHONE NUMBER 720 929-6156	TITLE Regulatory Analyst				
SIGNATURE N/A		DATE 5/6/2010				



KERR-McGEE OIL & GAS ONSHORE LP DRILLING PROGRAM

COMPANY NAME	KERF	R-McGEE OIL	& GAS ON	SHORE LP		DATE	May 6,	2010		
WELL NAME		Federal	1022-	-27H		TD	8,300'	MD/TVD		
FIELD Natura	l Buttes		COUNTY	Uintah	STATE	Utah		FINISHED EL	EVATION	5,440'
SURFACE LOCAT	ION	SE/4 NE/4	1,597' FNL	1,182' FEL	Sec	27 T 10S	R 22E		BHL	Straight Hole
		Latitude:	39.922694	Longitu	ıde: -109	.420739		NAD 83	_	
OBJECTIVE ZONE	E(S)	Wasatch/Me	saverde							
ADDITIONAL INFO)	Regulatory A	Agencies: Bl	_M (MINERA	LS), BLM ((SURFACE),	UDOGM, T	ri-County Health D	ept.	





KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

									DESIGN FACT	ORS
	SIZE	IN	ΓERVAI	L	WT.	GR.	CPLG.	BURST	COLLAPSE	TENSION
CONDUCTOR	14"		0-40'							
								3,390	1,880	348,000
SURFACE	8-5/8"	0	to	1875	28.00	IJ-55	LTC	1.07	2.14	6.56
								7,780	6,350	201,000
PRODUCTION	4-1/2"	0	to	8300	11.60	I-80	LTC	2.45	1.27	2.39

*Burst on suface casing is controlled by fracture gradient as shoe with gas gradient above.

D.F. = 2.87

- 1) Max Anticipated Surf. Press.(MASP) (Surface Casing) = (Pore Pressure at next csg point-(0.22 psi/ft-partial evac gradient x TVD of next csg point))
- 2) MASP (Prod Casing) = Pore Pressure at TD (0.22 psi/ft-partial evac gradient x TD)

(Burst Assumptions: TD = 11.6 ppg)
(Collapse Assumption: Fully Evacuated Casing, Max MW)

0.22 psi/ft = gradient for partially evac wellbore

(Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MASP 3,087 psi

3) Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

(Burst Assumptions: TD = 11.6 ppg)

0.59 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

MABHP 4,913 psi

CEMENT PROGRAM

	FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE LEAD	500	Premium cmt + 2% CaCl	215	60%	15.60	1.18
Option 1		+ .25 pps flocele				
TOP OUT CMT (1)	200	20 gals sodium silicate + Premium cmt	40		15.60	1.18
		+ 2% CaCl + .25 pps flocele				
TOP OUT CMT (2)	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
SURFACE		NOTE: If well will circulate water to su	urface, opt	ion 2 will be	e utilized	
Option 2 LEAD	1500	Prem cmt + 16% Gel + 10 pps gilsonite	140	35%	11.00	3.82
		+.25 pps Flocele + 3% salt BWOC				
TAIL	500	Premium cmt + 2% CaCl 15		35%	15.60	1.18
		+ .25 pps flocele				
TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.60	1.18
PROPULTION	0.400	Descriptor Life II + 20/ KOL + 0.05 and	0.4.0	000/	44.00	0.00
PRODUCTION LEAD	3,490'	Premium Lite II + 3% KCI + 0.25 pps	310	60%	11.00	3.38
		celloflake + 5 pps gilsonite + 10% gel				
		+ 0.5% extender				
TAIL	4,810'	50/50 Poz/G + 10% salt + 2% gel	1,350	60%	14.30	1.31
		+ 0.1% R-3				

^{*}Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE

Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe.

PRODUCTION

Float shoe, 1 jt, float collar. Centralize first 3 joints & every third joint to top of tail cement with bow spring centralizers.

ADDITIONAL INFORMATION

DRILLING SUPERINTENDENT:

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Drop Totco surveys every 2000'.	Maximum allowable	hole angle is 5	dearees

Most rigs have PVT Systems for mud monitoring. If no PVT is available, visual monitoring will be utililzed.

DRILLING ENGINEER:		DATE:		
	John Huycke / Emile Goodwin	·		

DATE:

^{*}Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION

Name of Cor	mpany: K	ERR-McGE	E OIL	& GAS ON	SHORE, 1	L. P.	
Well Name	•	FEDE	RAL 10	22-27H			_
Api No:	43-047-500	96	_Lease	Type:	FEDER	AL	
Section 27	Township_	10S Range	22E	_County	UINTA	H	
Drilling Cor	ntractor	PETE MAI	RTIN I	ORLG	RIG #	BUCKET	
SPUDDE	D:						
	Date	05/19/2010	<u> </u>				
	Time	3:00 PM					
	How	DRY					
Drilling wi	ill Commen	ce:					
Reported by		GA	RRET	Γ EATON			
Telephone#		(43:	5) 219-	1439			
Date	05/20/2010	Signed		CHD	·		

	FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER:					
	UTU-0473					
	RY NOTICES AND REPORTS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
	sals to drill new wells, significantly deepe ugged wells, or to drill horizontal laterals.		7.UNIT or CA AGREEMENT NAME:			
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: FEDERAL 1022-27H			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047500960000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	treet, Suite 600, Denver, CO, 80217 377	PHONE NUMBER: 9 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1597 FNL 1182 FEL QTR/QTR, SECTION, TOWNSHI	ID PANGE MEDIDIAN.		COUNTY: UINTAH			
1	Township: 10.0S Range: 22.0E Meridian:	S	STATE: UTAH			
11.	CK APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPORT,	OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
	ACIDIZE	☐ ALTER CASING	CASING REPAIR			
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME			
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION			
	OPERATOR CHANGE	PLUG AND ABANDON	L PLUG BACK			
✓ SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION			
5/19/2010	REPERFORATE CURRENT FORMATION TUBING REPAIR	SIDETRACK TO REPAIR WELL VENT OR FLARE	☐ TEMPORARY ABANDON ☐ WATER DISPOSAL			
☐ DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION			
Report Date:	_					
	WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU PETE MARTIN BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CMT W/28 SX READY MIXAccepted by the SPUD WELL LOCATION ON MAY 19, 2010 AT 14:00 HRS. Utah Division of Oil, Gas and Mining FOR RECORD ONLY FOR RECORD ONLY NAME (PLEASE PRINT) PHONE NUMBER TITLE						
Andy Lytle	720 929-6100	Regulatory Analyst				
SIGNATURE N/A		DATE 5/20/2010				

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURCE		FORM 9 5.LEASE DESIGNATION AND SERIAL NUMBER:			
	DIVISION OF OIL, GAS, AND MI	INING	UTU-0473			
	RY NOTICES AND REPORTS		6. IF INDIAN, ALLOTTEE OR TRIBE NAME:			
	sals to drill new wells, significantly deepe ugged wells, or to drill horizontal laterals.		7.UNIT or CA AGREEMENT NAME:			
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: FEDERAL 1022-27H			
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	9. API NUMBER: 43047500960000					
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	treet, Suite 600, Denver, CO, 80217 377	PHONE NUMBER: 9 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1597 FNL 1182 FEL QTR/QTR, SECTION, TOWNSHI	COUNTY: UINTAH					
1	Township: 10.0S Range: 22.0E Meridian:	S	STATE: UTAH			
11.	CK APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPORT,	OR OTHER DATA			
TYPE OF SUBMISSION		TYPE OF ACTION				
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NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME			
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5/19/2010	REPERFORATE CURRENT FORMATION TUBING REPAIR	SIDETRACK TO REPAIR WELL VENT OR FLARE	☐ TEMPORARY ABANDON ☐ WATER DISPOSAL			
☐ DRILLING REPORT	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION			
Report Date:	WILDCAT WELL DETERMINATION					
		☐ OTHER	OTHER:			
MIRU PETE MARTIN RAN 14" 36.7# SCHI	DIPPLIED OPERATIONS. Clearly show all post BUCKET RIG. DRILLED 20" (EDULE 10 CONDUCTOR PIPE. L LOCATION ON MAY 19, 20:	CONDUCTOR HOLE TO 40'. CMT W/28 SX READY MIXA 10 AT 14:00 HRS. OI FOF				
Andy Lytle	720 929-6100	Regulatory Analyst				
SIGNATURE N/A		DATE 5/20/2010				

	STATE OF UTAH DEPARTMENT OF NATURAL RESOUR			5 I FA	FORM 9 SE DESIGNATION AND SERIAL NUMBER:			
	DIVISION OF OIL, GAS, AND M	IINING	i .	UTU-				
SUNDI	RY NOTICES AND REPORT	S ON	WELLS	6. IF I	NDIAN, ALLOTTEE OR TRIBE NAME:			
	osals to drill new wells, significantly deepe ugged wells, or to drill horizontal laterals. s.			7.UNI	T or CA AGREEMENT NAME:			
1. TYPE OF WELL Gas Well		LL NAME and NUMBER: RAL 1022-27H						
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	SHORE, L.P.				NUMBER: 7500960000			
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	Street, Suite 600, Denver, CO, 80217 377		HONE NUMBER: 720 929-6007 Ext		LD and POOL or WILDCAT: IRAL BUTTES			
4. LOCATION OF WELL FOOTAGES AT SURFACE:				COUNT.				
1597 FNL 1182 FEL QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SENE Section: 27	IP, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian	ı: S		STATE				
11. CHE	ECK APPROPRIATE BOXES TO INDIC.	CATE NA	ATURE OF NOTICE, REPORT,	OR OT	HER DATA			
TYPE OF SUBMISSION			TYPE OF ACTION					
	ACIDIZE		ALTER CASING		CASING REPAIR			
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	☐ c	CHANGE TUBING		CHANGE WELL NAME			
	CHANGE WELL STATUS	_	COMMINGLE PRODUCING FORMATIONS		CONVERT WELL TYPE			
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN		RACTURE TREAT	L	NEW CONSTRUCTION			
	OPERATOR CHANGE	_	PLUG AND ABANDON	L	PLUG BACK			
SPUD REPORT Date of Spud:	PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION		RECLAMATION OF WELL SITE		RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON			
	TUBING REPAIR		/ENT OR FLARE		WATER DISPOSAL			
✓ DRILLING REPORT Report Date:	□ WATER SHUTOFF	_	SI TA STATUS EXTENSION		APD EXTENSION			
5/24/2010	☐ WILDCAT WELL DETERMINATION	□ c	OTHER	ОТ	HER:			
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. MIRU PROPETRO AIR RIG ON MAY 23, 2010. DRILLED 11" SURFACE HOLE TO 1900'. RAN 8 5/8" 28# IJ-55 SURFACE CSG. PUMP 140 BBLS FRESH WATERAccepted by the PUMP 20 BBLS GEL WATER. LEAD CEMENT W/ 170 SX CLASS G HI FILL @ Utah Division of 11.0 PPG, 3.82 YD. TAILED CEMENT W/ 200 SX CLASS G PREM LITE @ 1508, Gas and Mining PPG, 1.15 YD. DROP PLUG ON THE FLY, DISPLACED W/ 113 BBLS WATER RECORD ONLY BBLS LEAD TO SURFACE W/ 500 PSI OF LIFT @ 5 BBS/MIN. LAND PLUG 1000 PSI & FLOAT HELD. TOP OUT W/ 100 SX SAME CEMENT DOWN 1". NO CEMENT - WAIT 2 HRS & TOP OUT #2 W/ 100 SX SAME CEMENT. CEMENT TO SURFACE. WORT.								
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBE 720 929-6100	ER	TITLE Regulatory Analyst					
SIGNATURE N/A			DATE 5/25/2010					
L 17/7			3/23/2010					

		FORM 9						
	DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	G	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0473					
SUND	RY NOTICES AND REPORTS OF	N WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:					
bottom-hole depth, reenter plu	Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.							
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: FEDERAL 1022-27H					
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS		9. API NUMBER: 43047500960000						
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHONE N treet, Suite 600, Denver, CO, 80217 3779	1UMBER: 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES					
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1597 FNL 1182 FEL			COUNTY: UINTAH					
QTR/QTR, SECTION, TOWNSHI	(P, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian: S		STATE: UTAH					
11. CHE	CK APPROPRIATE BOXES TO INDICATE N	ATURE OF NOTICE, REPORT,	OR OTHER DATA					
TYPE OF SUBMISSION		TYPE OF ACTION						
	□ ACIDIZE □	ALTER CASING	CASING REPAIR					
NOTICE OF INTENT Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	CHANGE TUBING	☐ CHANGE WELL NAME					
	☐ CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE					
SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN ☐	FRACTURE TREAT	☐ NEW CONSTRUCTION					
	☐ OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK					
SPUD REPORT	PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION					
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON					
✓ DRILLING REPORT	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL					
Report Date: 8/20/2010	☐ WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION					
0/20/2010	□ WILDCAT WELL DETERMINATION □	OTHER	OTHER:					
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc. FINISHED DRILLING FROM 1900' TO 8500' ON AUGUST 18, 2010. RAN 4 ½" 11.6# I-80 PRODUCTION CSG. PUMP 40 BBLS SPACER, LEAD CEMENT W/ 4Accepted by the SX CLASS G PREM LITE @ 12.1 PPG, 2.23 YD. TAILED CEMENT W/ 1150 SXUtah Division of CLASS G 50/50 POZ MIX @ 14.3 PPG, 1.31 YD. DISPLACED W/ 131.4 BBGI, Gas and Mining WATER, BUMPED PLUG @ 3000 PSI, FLOATS HELD. 20 BBLS LEAD BACKOR RECORD ONLY ON AUGUST 20, 2010 @ 20:00 HRS.								
NAME (PLEASE PRINT) Andy Lytle	PHONE NUMBER 720 929-6100	TITLE Regulatory Analyst						
SIGNATURE N/A		DATE 8/23/2010						

	STATE OF UTAH DEPARTMENT OF NATURAL RESOURG	CES	FORM 9
	DIVISION OF OIL, GAS, AND MI	INING	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0473
SUND	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	sals to drill new wells, significantly deepe ugged wells, or to drill horizontal laterals.		7.UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well			8. WELL NAME and NUMBER: FEDERAL 1022-27H
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	9. API NUMBER: 43047500960000		
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PH treet, Suite 600, Denver, CO, 80217 377	ONE NUMBER: 9 720 929-6007 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1597 FNL 1182 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SENE Section: 27	IP, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian:	S	STATE: UTAH
11. CHE	CK APPROPRIATE BOXES TO INDICA	ATE NATURE OF NOTICE, REPORT,	OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	☐ ACIDIZE	☐ ALTER CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
SPUD REPORT Date of Spud:	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
	REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
✓ DRILLING REPORT	L TUBING REPAIR		☐ WATER DISPOSAL
Report Date: 9/4/2010	WATER SHUTOFF	☐ SI TA STATUS EXTENSION	APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:
THE SUBJECT WELL AT 11:00 A.M. THE	MPLETED OPERATIONS. Clearly show all powas PLACED ON PRODUCTION CHRONOLOGICAL WELL HISTATH THE WELL COMPLETION PHONE NUMBER	ON ON SEPTEMBER 4, 2010 FORY WILL BE SUBMITTED REPORT. Oil FOR	
Andy Lytle	720 929-6100	Regulatory Analyst	
N/A		DATE 9/7/2010	

Form 3160-4 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31, 2010

WELL COMPLETION	OR RECOMPLETION	REPORT	AND LOG
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	WELL (COMPL	ETION C	R R	ECO	MPLE1	TION F	REPOR	T.	AND L	.OG			ease Serial JTU473	No.	
la. Type o		Oil Well		Well		_	Other						6. If	Indian, Al	lottee o	r Tribe Name
b. Type o	f Completion	o 🔀 N	lew Well er	□ w	ork Ov	er 🔲	Deepen	□ Pl	lug l	Back	☐ Diff.	Resvr.	7. U	nit or CA	Agreem	ent Name and No.
2. Name of KERR-	Operator MCGEE OI	L&GAS C	NSHOREE	Li⊠ail:	andre	Contact: w.lytle@								ease Name EDERAL		
3. Address	P.O. BOX DENVER		217				3a P	a. Phone h: 720-9	No. 929-	(include 6100	e area code	;)		PI Well No		43-047-50096
4. Location	of Well (Re	-	•					•	its)*	•			10.	Field and P	ool, or	Exploratory
At surfa			L 1182FEL							00 400	74 1871		11.	Sec., T., R.	M., or	Block and Survey 10S R22E Mer SLB
At total	orod interval in depth SEI	NE 15971	-NL 1182FE	L 39.	92269	FEL N Lat, 1	L 39.92. 09.4207	209 N La 4 W Lon	it, 11	09.420	74 VV LON		12.	County or I		13. State
14. Date S ₁ 05/19/2	oudded		15. D	ate T.D /18/20	. Reac			16. Da	ate (Complete 2010	ed Ready to	Prod.		Elevations	(DF, K) 40 GL	B, RT, GL)*
18. Total D	Pepth:	MD TVD	8500 8497⁄	6	19.	Plug Bac	k T.D.:	MD TVD	,	84 84	52 49/ <i>8</i>	20. De	pth Bri	dge Plug S		MD TVD
21. Type E	lectric & Oth L-HDIL/ZDL	ner Mecha JCNGR-	nical Logs R BOREHOLE	un (Sui PRO	bmit co FILE L	py of eac OG	ch)				Was	well core DST run? ctional Su	•	X No X No X No	Yes	s (Submit analysis) s (Submit analysis) s (Submit analysis)
23. Casing a	nd Liner Rec	ord (Repo	ort all strings	set in	well)											(Sacial dial)
Hole Size	Size/G	rade	Wt. (#/ft.)		op ID)	Botton (MD)		e Cement Depth	ter		of Sks. & of Cement	Slurry (BE		Cement	Top*	Amount Pulled
20.000	14.000	STEEL	36.7				40				2	8				
11.000	1	.625 J55	28.0				84		4		57					
7.875	4	.500 180	11.6			84	96		+		155	3		<u></u>		
							-		+							
							1		十	*******			-			
24. Tubing	Record													•		
	Depth Set (N		acker Depth	(MD)	Siz	ze D	epth Set	(MD)	Pac	cker Dep	oth (MD)	Size	De	epth Set (M	D)	Packer Depth (MD)
2.375 25. Produci		7600			1		26 Perfo	ration Re	COTO	4		<u> </u>				
	ormation	I	Тор		Bot	ttom	20.10.10	Perforate			· · · · · · · · · · · · · · · · · · ·	Size		No. Holes	T	Perf. Status
A)	WASA	ATCH		4976		5967		Torrordic			O 5967	0.3			OPE	
B)	MESAVE	RDE		6775		7875				6775 T	O 7875	0.3			OPE	
C)																
D)	racture, Treat	mant Car		. E4-						 -			Ł_		<u> </u>	
	Depth Interva		nent Squeeze	, Etc.					A		1 T 61	. f - 4 1 - 1				
·-··			375 PUMP 5	,040 B	BLS SL	ICK H20	& 181.90				l Type of l	viateriai				
				-												
28 Producti	ion - Interval	٨	<u> </u>		· · · · · · · · · · · · · · · · · · ·							-				
Date First	Test	Hours	Test	Oil	To	Gas	Water	Oil	Grav	itv	Gas		Product	ion Method		
Produced 09/04/2010	Date 09/08/2010	Tested 24	Production	BBL 0.0		MCF 1546.0	BBL 288	Cor	rr. AP		Gravi	ty			FD.	
Choke	Tbg. Press.	Csg.	24 Hr.	Oil		Jas	Water		s:Oil		Well	Status		FLO	VS FRO	OM WELL
Size 20/64	Fiwg. 1075 SI		Rate	BBL 0		мсғ 1546	BBL 28	Rat				PGW				
	tion - Interva	L				.070		<u> </u>				GVV				
Date First	Test	Hours	Test	Oil		Gas	Water		Grav		Gas		Product	ion Method		
Produced	Date	Tested	Production	BBL	 	MCF	BBL	Cor	r. AP	1	Gravi	y				
Choke	Tbg. Press.	Csg.	24 Hr.	Oil		Jas 100	Water		:Oil		Well	Status				
Size	Flwg. SI	Press.	Rate	BBL	1 1 1 1	MCF	BBL	Rat	10						DE	CEIVED

(See Instructions and spaces for additional data on reverse side)
ELECTRONIC SUBMISSION #94595 VERIFIED BY THE BLM WELL INFORMATION SYSTEM
** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED **

							.,,,				
	ction - Interv							· · · · · · · · · · · · · · · · · · ·		*******	
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravit	у	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well S	Status		
28c. Produ	ction - Interv	al D									
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravit	Production Method ty		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well S	Status		
29. Dispos SOLD	ition of Gas(S	old, used	for fuel, vent	ed, etc.)		.					
30. Summa	ary of Porous	Zones (In	clude Aquife	rs):			· · ·		31. For	rmation (Log) Markers	
tests, ii	all important a neluding depti coveries.	zones of pe h interval	orosity and co tested, cushio	ontents there on used, time	of: Cored in tool open,	ntervals and a flowing and	all drill-stem shut-in pressure	s			
	Formation		Тор	Bottom		Description	ns, Contents, etc			Name	Top Meas. Depth
ATTA	EST NY H RDE	E DRILL	ING/COMPL	ETION CH			L HISTORY A	ND FINAL	. SURVI	EY.	
1. Ele 5. Sur	enclosed attac ctrical/Mecha adry Notice fo by certify that	nical Logs r plugging	and cement	verification hed informa	tion is comp		lysis	7 ed from all		e records (see attached ins	structions):
Name	(please print)	ANDY L	YTLE				Title F	REGULAT	ORY AN	IALYST	
Signat	ure	Electron	i Submissi	on)	*****		Date <u>1</u>	0/12/2010)		
Title 18 U	.S.C. Section	1001 and	Title 43 U.S.	C. Section 1	212. make i	t a crime for	any person knov	wingly and	willfully	to make to any departme	nt or agency

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.



SDI

Survey Report



Company:

Kerr McGee Oil and Gas Onshore LP

Project:

Uintah County, UT UTM12

Site:

FEDERAL 1022-27H

Well:

Wellbore:

FEDERAL 1022-27H

Design:

ОН

ОН

Local Co-ordinate Reference:

TVD Reference:

Well FEDERAL 1022-27H

GL 5439.8 & RKB 14' @ 5453.80ft (PIONEER

GL 5439.8 & RKB 14' @ 5453.80ft (PIONEER 69)

North Reference:

MD Reference:

Survey Calculation Method:

Database:

True Minimum Curvature

EDM5000-RobertS-Local

Project

Uintah County, UT UTM12

Map System: Geo Datum: Map Zone:

Universal Transverse Mercator (US Survey Feet)

NAD 1927 - Western US

Zone 12N (114 W to 108 W)

System Datum:

Mean Sea Level

Site

FEDERAL 1022-27H, SEC 27 T10S R22E

Site Position:

Lat/Long

Northing:

14,501,827.30 usft

Latitude:

39° 55' 21.820 N

Position Uncertainty:

0.00 ft

Easting: Slot Radius: 2,083,400.80 usft 13.200 in

Longitude:

109° 25' 12.210 W

1.01°

Grid Convergence:

Well

From:

FEDERAL 1022-27H, 1597' FNL 1182' FWL

Well Position

+N/-S +E/-W 0.00 ft 0.00 ft

14,501,827.30 usft Northing: Easting: 2,083,400.80 usft Latitude: Longitude: 39° 55' 21.820 N

Position Uncertainty

0.00 ft

Wellhead Elevation:

Ground Level:

109° 25' 12.210 W 5,439.80 ft

Wellbore

ОН

Magnetics

Model Name

Sample Date

Declination (°)

Dip Angle (°)

Field Strength

(nT)

IGRF2010

08/11/2010

0.00

11.14

65.84

52,378

0.00

Design

OH

Audit Notes:

Version:

1.0

Phase:

ACTUAL

Tie On Depth:

Vertical Section:

Depth From (TVD)

+N/-S

+E/-W

(ft)

Direction

0.00

0.00

(°) 136.10

Survey Program

Date 09/07/2010

From (ft)

To (ft)

Survey (Wellbore)

Tool Name

Description

14.00 1,912.00

1,874.00 Survey #1-Surface (OH) 8,447.00 Survey #2-Production (OH) INC MWD SDI

Inclinometer (Totco/Teledrift) MWD - Standard ver 1.0.1

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,874.00	1.40	0.00	1,873.72	0.00	0.00	0.00	0.00	0.00	0.00
1,912.00	1.73	186.85	1,911.71	-0.11	-0.07	0.03	8.22	0.87	-455.66
FIRST SDI P	RODUCTION MY	VD SURVEY							
2,197.00	2.38	184.66	2,196.53	-10.27	-1.06	6.67	0.23	0.23	-0.77
2,481.00	2.15	175.09	2,480.30	-21.46	-1.09	14.71	0.16	-0.08	-3.37
2,765.00	2.11	178.22	2,764.11	-31.99	-0.47	22.73	0.04	-0.01	1.10
3,050.00	2.20	171.80	3,048.91	-42.65	0.48	31.07	0.09	0.03	-2.25
3,303.00	2.19	173.39	3,301.72	-52.26	1.73	38.86	0.02	0.00	0.63



SDI Survey Report



Company:

Kerr McGee Oil and Gas Onshore LP

Project:

Uintah County, UT UTM12

Site:

FEDERAL 1022-27H

Well:

FEDERAL 1022-27H

Wellbore: Design:

ОН

ОН

Local Co-ordinate Reference:

TVD Reference:

Database:

Well FEDERAL 1022-27H

GL 5439.8 & RKB 14' @ 5453.80ft (PIONEER

69)

MD Reference:

GL 5439.8 & RKB 14' @ 5453.80ft (PIONEER 69)

True

North Reference:

Survey Calculation Method:

Minimum Curvature

EDM5000-RobertS-Local

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								ď	•

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
3,588.00	2.06	153.87	3,586.53	-62.27	4.61	48.07	0.26	-0.05	-6.85
3,882.00	1.27	120.10	3,880.41	-68.65	9.75	56.23	0.42	-0.27	-11.49
4,157.00	0.94	99.66	4,155.36	-70.55	14.61	60.97	0.19	-0.12	-7.43
4,441.00	1.22	117.98	4,439.31	-72.36	19.58	65.72	0.16	0.10	6.45
4,725.00	1.47	129.99	4,723.23	-76.12	25.04	72.22	0.13	0.09	4.23
5,010.00	1.80	139.79	5,008.12	-81.89	30.73	80.32	0.15	0.12	3.44
5,294.00	1.77	132.34	5,291.98	-88.25	36.85	89.15	0.08	-0.01	-2.62
5,578.00	1.95	144.25	5,575.83	-95.13	42.92	98.31	0.15	0.06	4.19
5,863.00	1.33	130.79	5,860.71	-101.22	48.26	106.40	0.25	-0.22	-4.72
6,146.00	1.74	122.15	6,143.61	-105.65	54.38	113.84	0.17	0.14	-3.05
6,431.00	1.91	133.91	6,428.47	-111.25	61.47	122.78	0.14	0.06	4.13
6,747.00	1.52	134.79	6,744.32	-117.85	68.23	132.24	0.12	-0.12	0.28
7,000.00	1.37	134.75	6,997.24	-122.35	72.76	138.61	0.06	-0.06	-0.02
7,284.00	1.40	151.28	7,281.16	-127.78	76.84	145.36	0.14	0.01	5.82
7,601.00	1.66	127.13	7,598.05	-133.95	82.36	153.63	0.22	0.08	-7.62
7,917.00	1.85	99.20	7,913.91	-137.53	91.05	162.23	0.27	0.06	-8.84
8,202.00	1.95	102.97	8,198.75	-139.35	100.31	169.97	0.06	0.04	1.32
8,447.00	3.68	131.30	8,443.46	-145.48	110.28	181.30	0.89	0.71	11.56

Survey Annotations		ATT THE LANGE OF THE		
Measured	Vertical	Local Coordir		마마마 하다는 것이 하는 것이 되었다. 그런 사람들은 사람들이 되었다. 나는 하는 사람들은 사람들은 사람들의 사람들은 사람들은 사람들이 사용했다.
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
1,912.00 8,447.00	1,911.71 8,443.46	-0.11 -145.48	-0.07 110.28	FIRST SDI PRODUCTION MWD SURVEY LAST SDI PRODUCTION MWD SURVEY

Checked By:	Approved By:	Date:

				O		ROCK Sion S		ıry Report
Well: FEDERA	AL 1022-	27H				: 5/19/20	1 1 1 1 1 1	Spud Date: 5/23/2010
Project: UTAH	I-UINTAI	1				1022-27H		Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLI	NG			Start Da	te: 5/9/2	010	1	End Date: 8/20/2010
Active Datum: Level)	RKB @	5,458.01ft (a	above Mear		т	EDERAL	. 1022-27	
Date	The second second	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
5/23/2010		- 9:00	3.00	DRLSUR	01	A	Р	MIRU PREPARE TO SPUD
		- 0:00	15.00	DRLSUR	02	В	Р	DRILL F/ 40' - 1900' WOB 8-15 ROT 45-65 DHR 94 GPM 550 OBP 1350 OFBP 1150 NO LOSSES LAST SURVEY 1.4 DEG
5/24/2010		- 1:30	1.50	DRLSUR	05	С	Р	CIRCULATE AND CONDITION PRIOR TO LDDS
		- 4:30	3.00	DRLSUR	06	Α	Ρ	LDDS BREAK BIT AND MUD MOTOR
		- 5:30	1.00	DRLSUR	12	Α	P	RIG UP TO RUN CASING
		- 8:30	3.00	DRLSUR	12	C	P	RUN 42 JOINTS 8.625 28# J-55 8RD-LTC CASING SHOE @ 1870'
		- 9:30	1.00	DRLSUR	12	В –	P	RIG DOWN CASING AND RIG RELEASE RIG 5-24-2010 @ 0930
		- 12:30	3.00	DRLSUR	12	E	P	TEST LINES TO 2000' PSI, PUMP 140 BBLS OF H20, PUMP 20 BBLS OF GEL WATER. PUMP 170 (115 BBLS) SX OF 11#, 3.82 YD, 23 GAL SX HI FILL LEAD CEMENT. PUMP 200 SX (40.9 BBLS) OF 15.8#, 1.15 YD, 5 GAL/SK TAIL CEMENT, DROP PLUG ON FLY AND DISPLACE W/ 113.8 BBLS OF 8.3# H20, 15BBLS OF LEAD TO SURFACE W/ 500 PSI OF LIFT @ 5 BBLS/MIN. W/ LAND PLUG 1000 PSI AND CHECK FLOAT. FLOAT HELD. PUMP 125 SX (25.6 BBLS) OF 4% CALC 15.8# 1.15 YD, 5 GAL/SK CEMENT DOWN 1" NO CEMETN WAIT TWO HOURS PUMP 100 SX SAME CEMENT, CEMENT TO SURFACE
8/11/2010		- 0:00	7.00	RDMO	01	E	Р	RDRT ,FLOOR,LAY OUT KELLY ,SUIT CASES,BUSTER,FLARELINES,PUMPS,PITS,WATE R ,AIR , MOST ELECTRICAL,PASON
8/12/2010		- 7:00	7.00	RDMO	01	E	Р	RDRT MISC ,SCOPE DOWN DERRICK W/ CRANE ASSIST & LOWER
		- 20:30 - 23:00	13.50 2.50	MIRU	01 14	B	P	SAFETY MEETING W/ RIG CREW, WEST ROC, J&C CRANE, MOUNTAIN WEST, LOAD OUT TRUCKS, MOVE 1/8 MILE, SET IN SUB, Y-BASE, BOAT, CARRIER, MUD PITS, PUMPS, FUEL TANK, L/P, ACCUMULATERS & R/U AIR, WATER, ELECTRICAL, HYDRAULICS, RAISE SUB, RAISE & SCOPE DERRICK, FLOOR, P/U KELLY, HOOK UP FLARE LINES, GAS BUSTER (CRANE ON LOC @ 06:00 RELEASED @ 13:30,5-TRUCKS 1-FORK LIFT ON LOC @ 07:00 RELEASED @ 12:00,7 EXTRA RIG HANDS) NIPPLE UP BOP
	23:00	- 0:00	1.00	MIRU	15	Α	Р	SAFETY MEETING W/ B&C QUICK TEST ,R/U &
0/12/2014								TEST FLOOR VALVES, UPPER & LOWER KELLY VALVES 250/5 MIN ,5000/10 MIN
8/13/2010		- 4:30 - 5:00	4.50	MIRU	15	A	P	TEST BOP, PIPE RAMS,BLIND RAMS,INSIDE & OUTSIDE KILL & CHOKE LINE VALVES, HCR VALVE, CHOKE MANIFOLD 250/5 MIN & 5000/ 10 MIN, ANNULAR 250/5 MIN ,2500/ 10 MIN, CASING 1500/30 MIN ,R/D QUICK TEST
			0.50	MIRU	14	В	P	INSTALL WEAR RING
		- 9:00	4.00	DRLPRO	06	Α	Р	SAFETY MEETING W/ KIMZEY, R/U & P/U GT-1 BIT ,.21/STRAIGHT MOTOR & 11 DCS, 3 HWDP ,41 JTS DP, R/D KIMZEY
		- 10:00		DRLPRO	09	Α	Р	CUT & SLIP 120' DRILLING LINE
	10:00	- 11:00	1.00	DRLPRO	23		Р	PRESPUD INSPECTION, INSTALL DRILLING RUBBER, SCURE STACK, FIX LEAK ON DREESER SLEEVE GAS BUSTER

Operation Summary Report

 Well: FEDERAL 1022-27H
 Spud Conductor: 5/19/2010
 Spud Date: 5/23/2010

 Project: UTAH-UINTAH
 Site: FEDERAL 1022-27H
 Rig Name No: PIONEER 69/69, PROPETRO/

 Event: DRILLING
 Start Date: 5/9/2010
 End Date: 8/20/2010

Active Datum: F				e: 5/9/20	310			End Date: 8/20/2010		
Active Datum: RKB @5,458.01ft (above Mean S Level)			n Sea	UWI: F	EDERAL	_ 102 2 -27	7H			
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation		
	11:00 - 14:00	3.00	DRLPRO	02	F	Р	1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	DRILL CMT ,F.E. ,& OPEN HOLE F/ 1792' TO 1914'		
	14:00 - 14:30	0.50	DRLPRO	02	В	Р		SPUD 8/13/2010 @ 14:00 ,DRILL 36' NEW HOLE F/ 1914' TO 1950'		
	14:30 - 16:00	1.50	DRLPRO	06	Α	P		TOOH F/ NEW BIT & DIRECTIONAL TOOLS		
	16:00 - 19:00	3.00	DRLPRO	06	Α	Р		P/U Q506F, ADJ MOTOR TO 1.5 DEG, P/U & SCRIBE DIR TOOLS ,TIH TO SHOE		
	19:00 - 19:30	0.50	DRLPRO	07	Α	Р		RIG SERVICE		
	19:30 - 21:30	2.00	DRLPRO	08	Α	Р		RIG REPAIR REPLACE AIR LINES TO KELLY SPINNERS		
	21:30 - 22:00	0.50	DRLPRO	06	Α	Р		FINISH TIH		
8/14/2010	22:00 - 0:00 0:00 - 6:00	2.00	DRLPRO	02	A	Р		DRILL F/ 1950' TO 2109' (159' @ 79.5' HR) WOB 15,RPM 60 ,MMRPM 95, SPM 120, GPM 454,UP/SO/ROT 83-78-82 ,ON/OFF 1200-900 ,DIFF 350 ,WATER W/ GEL & POLY SWEEPS		
8/14/2010	6:00 - 13:00	6.00	DRLPRO	02	В	Р		DRILL F/ 2109' TO 2818' (709' @ 118.1' HR) WOB 17, RPM 60, MMRPM 95 ,SPM 120, GPM 454, UP/SO/ROT 83-78-82, ON OFF 1200-900, DIFF 350, WATER W/ GEL & POLY SWEEPS		
		7.00	DRLPRO	02	В	Р		DRILL F/ 2818' TO 3546' (728' @ 104' HR) WOB 16-18, RPM 60, MMRPM 95, SPM 120, GPM 454, UP/SO/ROT 91-80-84, DIFF 280-420,WATER W/ GEL & POLY SWEEPS ,SLIDES 3451-3461		
	13:00 - 13:30 13:30 - 23:30	0.50	DRLPRO	07	A	P -		RIG SERVICE		
	23:30 - 0:00	10.00 0.50	DRLPRO DRLPRO	02	В	P		DRILL F/ 3546' TO 4597' (1051' @ 105.1' HR) 16_18 ,RPM 60 ,MMRPM 95 ,SPM 120 ,GPM 454 ,UP/SO/ROT 122-115-118, ON/OFF 1340-1075, DIFF 280-400, WATER W/ GEL/SAWDUST & POLY SWEEPS ,(SLIDES 3671-3681,3734-3744,3892-3902)		
8/15/2010	0:00 - 9:30	9.50	DRLPRO	08 02	A B	Z P		RIG REPAIR ,CHANGE FUEL FILTERS ON ROTARY MOTOR		
0/13/2010		9.50	DKLFKO	02	Б	F		DRILL F/ 4597' TO 5473' (876' @ 92.2' HR) WOB 16-18, RPM 55-60, MMRPM 95 ,SPM 120, GPM 454 ,UP/SO/ROT 135-122-228, ON/OFF 1380-1100, DIFF 250-380, WATER W/ GEL/SAWDUST & POLY SWEEPS,8'-10' FLARE, SLIDE 5063' TO 5073'		
	9:30 - 11:30	2.00	DRLPRO	05	В	Р		DUMP PRODUCTION WATER F/ MUD PITS, FILL W/ FRESH WATER, DISPLACE HOLE W/ FRESH WATER, START MUD UP		
	11:30 - 14:00	2.50	DRLPRO	02	В	Р		DRILL F/ 5473' TO 5631' (158' @ 63.2' HR) WOB 18-20, RPM 58, MMRPM 95, SPM 120, GPM 454, UP/SO/ROT 138-120-128, ON/OFF 1440-1150, DIFF 250-350 ,WT 9.2,VIS 35 W/ SAWDUST SWEEPS,		
	14:00 - 14:30	0.50	DRLPRO	07	Α	Р		RIG SERVICE		
	14:30 - 0:00	9.50	DRLPRO	02	Α	Р		DRILL F/ 5631' TO 6136' (505' @ 53.1' HR) WOB 20-22, RPM 55, MMRPM 95, SPM 120, GPM 454, UP/SO/ROT 140-125-133, ON/OFF 1750-1450, DIFF 220-380, WT 9.7, VIS 37 W/ SAW DUST SWEEPS, SLIDES 5630-5640, 5725 -5735',5820'-5831',5947'-5957',6073'-6083'		
8/16/2010	0:00 - 6:00	6.00	DRLPRO	02	В	Р		DRILL F/ 6136' TO 6484' (348' @ 58' HR) WOB 20-22, RPM 55, MMRPM 95, SPM 120, GPM 454, UP/SO/ROT 140-125-135,ON/ OFF 1900-1620, DIFF 250-350,WT 10.2, VIS 37(LOST 80 BBLS TO SEEPAGE)		
	6:00 - 15:00	9.00	DRLPRO	02	В	Р		DRILL F/ 6484' TO 6895' (411' @ 45.6' HR) WOB 20-22, RPM 55, MMRPM 95, SPM 120, GPM 454, UP/SO/ROT 150-130-143, ON/OFF 2120-1750, DIFF 250-400, WT 10.5, VIS 37 (LOST 40 BBLS TO SEEPAGE)		
	15:00 - 15:30	0.50	DRLPRO	07	Α	Р		RIG SERVICE		

Operation Summary Report

Well: FEDERAL 1022-27H Spud Conductor: 5/19/2010 Spud Date: 5/23/2010 Project: UTAH-UINTAH Site: FEDERAL 1022-27H Rig Name No: PIONEER 69/69, PROPETRO/ Event: DRILLING Start Date: 5/9/2010 End Date: 8/20/2010

July 2					0.0		Life Date. 0/20/2010		
Active Datum: RKB @5,458.01ft (above Mean Sea Level)			n Sea	UWI: FEDERAL 1022-27H					
Date	Sta	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Ope	ration
		- 0:00	8.50	DRLPRO	02	В	Р	DRILL F/ 6895' TO 7306' (22-24, RPM 55 ,MMRPM UP/SO/ROT 153- 135-146 220-350, WT 10.7, VIS 35	94, SPM 118, GPM 447, 6, ON/0FF 1900-2165, DIFF
8/17/2010	0:00	- 7:00	7.00	DRLPRO	02	В	Р	DRILL F/ 7306' TO 7622, 4 20-23, RPM 55, MMRPM 9 UP/SO/ROT 155-137-148 245-370 WT 11.0, VIS 40, 7528-7538, 7590-7600)	94, SPM 118, GPM 447, ON/OFF 1920-2165, DIFF
	7:00	- 7:30	0.50	DRLPRO	05	С	Ρ	CIRC & PUMP PILL	1
	7:30	- 8:00	0.50	DRLPRO	06	E	Р	TRIP OUT 10 STANDS	
	8:00	- 12:30	4.50	DRLPRO	05	Α	Р	CIRC & WORK PIPE F/ A SAFETY MEETING	NADARKO STAND DOWN
	12:30	- 13:00	0.50	DRLPRO	06	E	P	TIH 10 STANDS	· ·
	13:00	- 18:00	5.00	DRLPRO	02	В	Р	DRILL F/ 7622' TO 7812' (20-23, RTPM 55, MMRPM UP/SO/ROT 160-143-150 220-350, WT 11.0, VIS 46 7655-7665, 7717-7727)	l 91, SPM 115, GPM435, ,ON/OFF 2012-1750, DIFF

	0.00	0.50	BREFRO	02	Б	•	22-24, RPM 55, MMRPM 94, SPM 118, GPM 447, UP/SO/ROT 153- 135-146, ON/0FF 1900-2165, DIFF 220-350, WT 10.7, VIS 35, 2 % LCM
8/17/2010	0:00 - 7:00	7.00	DRLPRO	02	В	Р	DRILL F/ 7306' TO 7622, (316' @ 45.1' HR) WOB 20-23, RPM 55, MMRPM 94, SPM 118, GPM 447, UP/SO/ROT 155-137-148, ON/OFF 1920-2165, DIFF 245-370 WT 11.0, VIS 40, 2% LCM (SLIDES F/ 7528-7538, 7590-7600)
	7:00 - 7:30	0.50	DRLPRO	05	С	Р	CIRC & PUMP PILL
	7:30 - 8:00	0.50	DRLPRO	06	Е	Р	TRIP OUT 10 STANDS
	8:00 - 12:30 12:30 - 13:00	4.50	DRLPRO	05	A	Р	CIRC & WORK PIPE F/ ANADARKO STAND DOWN SAFETY MEETING
	13:00 - 18:00	0.50	DRLPRO	06	E	P	TIH 10 STANDS
	18:00 - 18:30	5.00 0.50	DRLPRO DRLPRO	02 07	В	P	DRILL F/ 7622' TO 7812' (190' @ 38' HR) WOB 20-23, RTPM 55, MMRPM 91, SPM 115, GPM435, UP/SO/ROT 160-143-150, ON/OFF 2012-1750, DIFF 220-350, WT 11.0, VIS 46, LCM 2% (SLIDES 7655-7665, 7717-7727)
	18:30 - 0:00	5.50			A	Р	RIG SERVICE
		5.50	DRLPRO	02	В	Р	DRILL F/ 7812' TO 7990' (178' @ 32.2' HR) WOB 20-24, RPM 55, MMRPM 91, SPM 115, GPM 435, UP/SO/ROT 165-145-158, ON/OFF 2046/2385, DIFF 250-420, WT 11.5, VIS 50, LCM 2 % (SLIDES 7780-7790, 7844-7854, 7907-7917)
8/18/2010	0:00 - 8:00	8.00	DRLPRO	02	В	P	DRILL F/ 7990' TO 8349' (359' @ 44.8' HR) WOB 20-23, RPM 55-60, MMRPM 87, SPM 110, GPM 416, UP/SO/ROT 165-145-158, ON/OFF 2260- 1950, DIFF 220-410, WT 11.6, VIS 42, LCM 3%
	8:00 - 8:30	0.50	DRLPRO	07	Α	P	RIG SERVICE
	8:30 - 12:00	3.50	DRLPRO	02	В	Р	DRILL F/ 8349' TO 8500' TD @ 12:00 8/18/2010, (151' @ 43.1' HR) WOB 22, RPM 60, MMRPM87, SPM 110, GPM 416, UP/SO/ROT 168-148-160, ON/OFF 2260/1950, DIFF 22O-400, WT 11.8, VIS, 42, LCM 3%
	12:00 - 13:30	1.50	DRLPRO	05	С	Р	CIRC F/ SHORT TRIP
	13:30 - 20:00	6.50	DRLPRO	06	Α	Р	TOOH L/D DIRECTIONAL TOOLS,MOTOR & BIT (SHUT DOWN 20 MIN F/ LIGHTENING STORM) TIGHT 6392-6381,5605 & 2630 20-40K
	20:00 - 0:00	4.00	DRLPRO	06	Α	Р	P/U RERUN TRICONE BIT & BIT SUB TIH, FILL PIPE @ SHOE & 5800'
8/19/2010	0:00 - 1:30	1.50	DRLPRO	06	E	Р	FINISH TIH
	1:30 - 2:30	1.00	DRLPRO	03	D	₽	WASH 125' TO BTM, NO FILL
	2:30 - 4:30	2.00	DRLPRO	05	С	Р	CIRC F/ LOGS, PUMP PILL
	4:30 - 9:30	5.00	DRLPRO	06	Α	Р	TOOH F/ LOGS ,TIGHT 7724' TO 7258', 6252, 5600 20-40K
	9:30 - 14:00	4.50	DRLPRO	11	С	Р	SAFETY MEETING W/ BAKER ATLAS, R/U & RUN TRIPLE COMBO TO 8492', LOG OUT, NO PROBLEMS ,R/D BAKER ATLAS
	14:00 - 19:00	5.00	DRLPRO	06	Α	Р	TIH W/ RERUN TRICONE & BIT SUB, FILL PIPE @ 2000' & 6000'
	19:00 - 21:00	2.00	DRLPRO	05	C .	P -	CIRC, SAFETY MEETING W/ KIMZEY, R/U L/D MACHINE
0/00/0040	21:00 - 0:00	3.00	DRLPRO	06	A	P	LDDP
8/20/2010	0:00 - 5:00	5.00	DRLPRO	06	Α	Р	LDDP, BREAK KELLY, L/D BHA, PULL WEAR RING
	5:00 - 11:30	6.50	DRLPRO	12	С	Ρ	S/M W/ CASERS R/U & RUN 210 JTS, 4.5, 11.6, I-80, LANDED SHOE @ 8496, FLOAT @ 8452', MARKER @ 3949,
	11:30 - 13:30	2.00	DRLPRO	05	D	Р	R/U & CIRC F/ CEMENT, R/D KIMZEY CASING, SAFETY MEETING W/ BJ SERVICES, HOOK UP BJ

	0	perat	tion S	Summ	ary Report
Well: FEDERAL 1022-27H	Spud C	onducto	r: 5/19/2	010	Spud Date: 5/23/2010
Project: UTAH-UINTAH	Site: FE	DERAL	1022-27	'H	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLING	te: 5/9/2	010		End Date: 8/20/2010	
Active Datum: RKB @5,458.01ft (above Mea Level)	n Sea	UWI: F	EDERA	L 1022-2	7H
Date Time Duration Start-End (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)
13:30 - 16:00 2.50	DRLPRO	12	E	Р	CEMENT W/ 40 BBL WATER PREFLUSH ,403 SX 12.1 PPG, 2.23 YLD LEAD, 1150 SX 14.3 PPG, 1.31 YLD TAIL, DISPLACE W/ 131.4 BBLS CLAY TREAT WATER, FINAL LIFT 2511, BUMP PLUG @ 3000, FLOATS HELD ,20 BBLS LEAD CMT BACK TO PIT,FULL RETURNS THROUGHOUT JOB, FLUSH STACK, R/D BJ, L/D LANDING JOINT
16:00 - 20:00 4.00	DRLPRO	14	Α	P	NIPPLE DOWN , CLEAN PITS, RELEASE RIG @ 20:00 TO NBU 1022-22P

10/7/2010

9:36:43AM

			O	perat	ion S	umma	ary Repor	t
Well: FEDERA	AL 1022-27H		Spud C	onductor	: 5/19/20	<u></u> 310	Spud Date: 5	/23/2010
Project: UTAH	-UINTAH			DERAL			-	Rig Name No: PIONEER 69/69, PROPETRO/
Event: DRILLI	NG		Start Da	ite: 5/9/2	010			End Date: 8/20/2010
Active Datum: Level)	RKB @5,458.01ft (7		L 1022-27	'H	210 340. 0/20/2010	
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation
Date			Phase	Code		P/U		CONDUCTOR CASING: Cond. Depth set: 40 Cement sx used: SPUD DATE/TIME: 5/23/2010 9:00 SURFACE HOLE: Surface From depth: 40 Surface To depth: 1,900 Total SURFACE hours: 15.00 Surface Casing size: 8 5/8 # of casing joints ran: 42 Casing set MD: 1,870.0 # sx of cement: 170/LEAD 200/TAIL Cement blend (ppg:) 11#/LEAD 15.8/TAIL Cement blend (ppg:) 11#/LEAD 1.15/TAIL # of bbls to surface: 0 TOPPED OF BY PETE MARTIN Describe cement issues: PUMP 225 SX DOWN 1" TO SURFACE Describe hole issues: PRODUCTION: Rig Move/Skid start date/time: 8/12/2010 6:00 Rig Move/Skid finish date/time: Total MOVE hours: -969654.0 Prod Rig Spud date/time: 8/13/2010 11:00 Rig Release date/time: 8/20/2010 20:00 Total SPUD to RR hours:177.0 Planned depth MD 8,448 Planned depth TVD 8,448 Actual MD: 8,500 Actual TVD: 8,497 Open Wells \$: \$666,465 AFE \$: \$674,066 Open wells \$/ft: \$78.41 PRODUCTION HOLE: Prod. From depth: 1,914 Prod. To depth: 8,500
								Total PROD hours: 99 Log Depth: 8492 Production Casing size: 4.5,11.6,I-80 BT&C # of casing joints ran: 201 Casing set MD: 8,496.3
								# sx of cement: 403 LEAD, 1150 TAIL Cement blend (ppg:) 12.1LEAD 14.3 TAIL Cement yield (ft3/sk): 2.23 LEAD 1.31 TAIL Est. TOC (Lead & Tail) or 2 Stage: 18 LEAD 3200 TAIL Describe cement issues: 20 BBLS LEAD TO BACK TO PIT Describe hole issues: HOLE SEEPING @ 6300'
								DIRECTIONAL INFO: KOP: Max angle: Departure: Max dogleg MD:

10/7/2010 9:36:43AM

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				0	perat	ion Su	ımm	ary Report				
Well: FEDERA	L 1022-	27H		Spud Co	onductor: 5/19/2010 Spud Date: 5/23/2010							
Project: UTAH-	-UINTAI	Н		Site: FEI	DERAL	1022-27H		Rig Name No: GWS 1/1				
Event: COMPL	ETION			Start Da	te: 8/29/	2010		End Date: 9/3/2010				
Active Datum: RKB @5,458.01ft (above Mean Sel Level)			Sea	UWI: FEDERAL 1022-27H								
Date	St	Time art-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From Operation (ft)				
8/29/2010		- 7:30	0.50	COMP	48		Р	HOLD SFT MTG				
0/04/0040		- 15:00	7.50	COMP	31	1	P	ROAD RIG & EQUIP F/ NBU 1022-27A TO LOC. MI RU RIG & EQUIP. NDWH, NUBOPE. PREP & TALLY 2 3/8" J-55 TBG. P/U 3 7/8" MILL, BIT SUB & RIH P/U TBG OFF TRAILER. EOT @ 3630'. SWI. SDFN				
8/31/2010	7:00	- 7:30	0.50	COMP	48		Р	HSM. CLEAN WORK AREA				
9/1/2010	7:30 7:00	- 15:00 - 7:30	7.50 0.50	COMP	31 48	I	P P	HSM. CONT TO RIH P/U TBG OFF TRAILER TO 6820, X/O POOH STD BACK TBG. ND BOPE. NU FRAC VALVES. FILL CSG. SWI. SDFN HSM				
		- 15:00	7.50	COMP	37	В	P	MIRU B&C QUICK TST. PSI TST CSG & FRAC VLV'S TO 7000#, (HELD). MIRU CUTTERS. PERF STG 1 PERF'S F/ 7867' - 7875', 3 SPF, 120 DEG PHASING (24 HOLES). POOH. PREP TO FRAC. SWI. SDFN				
9/2/2010	7:00	- 7:30	0.50	COMP	48		Р	HSM & JSA.				
	7:30	- 11:45	4.25	COMP	36	E	Р	MIRU SUPERIOR WELL SERVICES. HOLD SM & JSA. PT SURFACE EQUIP. TO 8000 PSI.				

Operation Summary Report

Well: FEDERA	_ 1022-27H	Sp.	ud Conducto	r: 5/19/2010	Spud Date: 5	/23/2010			
Project: UTAH-	UINTAH	Sit	e: FEDERAL	1022-27H		Rig Name No: GWS 1/1			
Event: COMPL	ETION	Sta	art Date: 8/29	/2010		End Date: 9/3/2010			
Active Datum: F Level)	RKB @5,458.01ft (a	bove Mean Sea	UWI:	FEDERAL 1022-2	?7H				
Date	Time Start-End	Duration Ph	ase Code	Sub P/U Code	MD From (ft)	Operation			
	11:45 -	cc	MP			11:45 OPEN WELL FRAC STG 1) WHP 1440 PSI, BRK DWN 2.8 BPM @ 3465 PSI. ISIP 2489 PSI, FG 75. PMP 6 BBLS 15% HCL, PMP 120 BBLS 10/M SCALE INHIBITOR. PUMP 260 BBLS @ 39.7 BPM @ 4513 PSI, 20/24 PERFS OPEN = 81%			
						MP 5425 PSI, MR 40.2 BPM, AP 4281 PSI, AR 39.6 BPM, ISIP 2701 PSI, FG .78, NPI 212 PSI. PMP 964 BBLS SW & 24,525 LBS OF 30/50 SND & 5,480 LBS OF 20/40 SLC SND. TOTAL PROP 30,005 LBS, SWI, 12:22 X-OVER FOR WL.			
						PERF STG 2) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 7780', P/U & PERF F/ 7748'-50', 4 SPF, 8 HOLES. 7672'-74', 4 SPF, 8 HOLES. 7632'-34', 4 SPF, 8 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.			
						13:22 OPEN WELL FRAC STG 2) WHP 2260 PSI, BRK DWN 4.7 BPM @ 3821 PSI. INJECT TEST 10.2 BPM @ 3200 PSI. ISIP 2603 PSI, FG .78. PUMP 160 BBLS @ 34.7 BPM @ 6002 PSI. 16/24 PERFS OPEN = 66%			
						MP 6655 PSI, MR 40.5 BPM, AP 5175 PSI, AR 38.4 BPM, ISIP 2700 PSI, FG .79, NPI 124 PSI. PMP 1240 BBLS SW & 43,422 LBS OF 30/50 SND & 4,694 LBS OF 20/40 SLC SND. TOTAL PROP 48,116 LBS, SWI, 14:08 X-OVER FOR WL.			
						PERF STG 3) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 & 120 DEG PHASING. RIH SET CBP @ 7270', P/U PERF F/7233'-35', 3 SPF, 6 HOLES. 7174'-76', 4 SPF, 8 HOLES. 7085'-87', 3 SPF, 6 HOLES. 7022'-23', 4 SPF, 4 HOLES. 24 HOLES. POOH, X-OVER FOR FRAC CREW.			
						14:58 OPEN WELL. FRAC STG 3) WHP 330 PSI, BRK DWN 4.5 BPM @ 2284 PSI. ISIP 1476 PSI, FG .65. PUMP 180 BBLS @ 50.7 BPM @ 5373 PSI. 16/24 PERFS OPEN = 66%			
						MP 5490 PSI, MR 51.8 BPM, AP 4875 PSI, AR 50.4 BPM, ISIP 2502 PSI, FG .79, NPI 1026 PSI. PMP 822 BBLS SW & 24,704 LBS OF 30/50 SND & 5,407 LBS OF 20/40 SLC SND. TOTAL PROP 30111 LBS, SWI, 15:22 X-OVER FOR WL.			
						PERF STG 4) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 6925', P/U & PERF F/ 6893'-96', 4 SPF, 12 HOLES. 6775'-78', 4 SPF, 12 HOLES. 24 HOLES POOH, X-OVER FOR FRAC CREW.			
						16:03 OPEN WELL			

10/7/2010

9:37:47AM

US ROCKIES REGION Operation Summary Report Well: FEDERAL 1022-27H Spud Conductor; 5/19/2010 Spud Date: 5/23/2010 Project: UTAH-UINTAH Site: FEDERAL 1022-27H Rig Name No: GWS 1/1 **Event: COMPLETION** Start Date: 8/29/2010 End Date: 9/3/2010 Active Datum: RKB @5,458.01ft (above Mean Sea UWI: FEDERAL 1022-27H Level) Date Time Duration Phase Code Sub P/U MD From Operation Start-End (hr) Code (ft) FRAC STG 4) WHP 290 PSI, BRK DWN 5.2 BPM @ 3417 PSI. ISÍP 1643 PSI, FG .68. PUMP 150 BBLS @ 47 BPM @ 5686 PSI 16/24 PERF OPEN = 66% MP 6003 PSI, MR 53.5 BPM, AP 5214 PSI, AR 49.5 BPM, ISIP 3002 PSI, FG .88, NPI 1367 PSI. PMP 655 BBLS SW & 18,611 LBS OF 30/50 SND & 5,096 LBS OF 20/40 SLC SND. TOTAL PROP 23,707 LBS, SWI. 16:25 X-OVER FOR WL. PERF STG 5) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 5997', P/U & PERF F/ 5961'-67', 4 SPF, 24 HOLES, 24 HOLES, POOH, X-OVER FOR FRAC CREW. 17:05 OPEN WELL FRAC STG 5) WHP 120 PSI, BRK DWN 4.4 BPM @ 2828 PSI. ISIP 1760 PSI, FG .73. PUMP 90 BBLS @ 50.3 BPM @ 5330 PSI 16/24 PERFS OPEN = MP 5428 PSI, MR 51.3 BPM, AP 4824 PSI, AR 50 BPM, ISIP 2168 PSI, FG .80, NPI 408 PSI. PMP 648 BBLS SW & 22,107 LBS OF 30/50 SND & 4,649 LBS OF 20/40 SLC SND. TOTAL PROP 26,756 LBS, SWI, 17:28 X-OVER FOR WL. PERF STG 6) PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, 0.36 HOLE SIZE. 90 DEG PHASING. RIH SET CBP @ 5012', P/U & PERF F/ 4976'-82', 4 SPF, 24 HOLES, 24 HOLES, POOH, X-OVER FOR FRAC CREW. 18:01 OPEN WELL FRAC STG 6) WHP 116 PSI, BRK DWN 4.7 BPM @ 2748 PSI. ISIP 815 PSI, FG .60. PUMP 90 BBLS @ 51.2 BPM @ 4133 PSI 17/24 PERFS OPEN = MP 4325 PSI, MR 52 BPM, AP 3835 PSI, AR 50.4 BPM, ISIP 1853 PSI, FG .81, NPI 1038 PSI. PMP 711 BBLS SW & 16,931 LBS OF 30/50 SND & 6,276 LBS OF 20/40 SLC SND. TOTAL PROP 23,207 LBS, SWI. 18:35 X-OVER FOR WL. KILL PLG) PU 4 1/2 8K HALCO CBP, RIH SET CBP

10/7/2010 9:37:47AM

9/3/2010

7:00 - 7:15

COMP

48

Ρ

0.25

CBPs.

HSM & JSA.

@ 4926'. POOH & LD TOOLS. SWI-RD CUTTERS

00:00 SDFN. PREP WELL TO RIH W/BHA & D/O

WL & SUPERIOR FRAC.

Well: FEDERA	AL 1022-27H		Spud C	onductor	: 5/19/20	010	Spud Date: 5	23/2010		
Project: UTAH	I-UINTAH		Site: FE	DERAL 1	1022-27	H		Rig Name No: GWS 1/1		
Event: COMP		·		te: 8/29/2	2010		···	End Date: 9/3/2010		
Active Datum: RKB @5,458.01ft (above Mean Sea Level)					EDERA	L 1022-27	-			
Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (ft)	Operation		
	7:15 - 7:15	0.00	COMP	44	С	Р		WHP = 0 PSI. ND FRAC VALVES, NU BOP. RU FLOOR & TBG EQUIP. PU 4 1/2" BIT, POBS & XN NIPPLE. RIH ON NEW 2 3/8" 4.7# L80 TBG. TO 4900. RU PWR SWVL & PMP. EST CIRC. PT BOPs TO 3000 PSI. RIH TAG CBP @ 4926'. (NO FILL).		
								CBP #1) DRLG OUT HALCO 8K CBP @ 4926' IN 8 MIN. 300 DIFF PSI. RIH TAG FILL @ 4982. C/O 30 OF SDN. FCP = 0 PSI.		
								CBP #2) DRLG OUT HALCO 8K CBP @ 5012' IN 10 MIN. 50 DIFF PSI. RIH TAG FILL @ 5967. C/O 30' OF SDN. FCP = 0 PSI.		
								CBP #3) DRLG OUT HALCO 8K CBP @ 5997' IN 8 MIN. 250 DIFF PSI. RIH TAG FILL @ 6895. C/O 30 OF SDN. FCP = 50 PSI.		
								CBP #4) DRLG OUT HALCO 8K CBP @ 6925' IN 5 MIN. 500 DIFF PSI. RIH TAG FILL @ 7225. C/O 45 OF SDN. FCP = 100 PSI.		
								CBP #5) DRLG OUT HALCO 8K CBP @ 7270' IN 10 MIN. 600 DIFF PSI. RIH TAG FILL @ 7750. C/O 30 OF SDN. FCP = 150 PSI.		
								CBP #6) DRLG OUT HALCO 8K CBP @ 7780' IN 4 MIN. 500 DIFF PSI. RIH TO 8212'. (BTM PERF @ 7875', PBTD @ 8451'). FCP = 200 PSI. CIRC WELL CLEAN.		
								ND PWR SWVL, NU TBG EQUIP. LD 19 JTS ON FLOAT, (45 TOTAL ON FLAOT). LND TBG ON HNGR W/240 JTS NEW 2 3/8" 4.7# L80. RD FLOOR & TBG EQUIP. ND BOP, DROP BALL, NUWH. PMP OFF BIT @ 1500 PSI. WAIT 30 MIN FOR BIT TO FALL TO BTM. TURN WELL TO F.B.C.		
								KB 18' HANGER 0.83' XN NIPPLE 1.1' TBG 240 JTS = 7580.55' XN NIPPLE @ 7599.38" EOT @ 7600.48' (285 JTS DLVRD - 45 JTS RTND)		
9/4/2010	7:00 -		PROD	33	A			TWTR = 5270 BBLS TWR = 850 BBLS TWLTR = 4420 SICP = 1150 PSI, SITP = 000 PSI. 7 AM FLBK REPORT: CP 1150#, TP 1175#, 20/64" CK, 34 BWPH, HVY SAND, - GAS TTL BBLS RECOVERED: 2025		
	11:00 -		PROD	50				BBLS LEFT TO RECOVER: 3245 WELL TURNED TO SALES @ 1100 HR ON 9/4/10 - 900 MCFD, 600 BWPD, CP 1400#, FTP 1300#, CK		
9/5/2010	7:00 -			33	Α			20/64" 7 AM FLBK REPORT: CP 1900#, TP 1200#, 20/64" CK, 23 BWPH, HVY SAND, 1.4 GAS TTL BBLS RECOVERED: 2666		

10/7/2010

9:37:47AM

US ROCKIES REGION Operation Summary Report Well: FEDERAL 1022-27H Spud Conductor: 5/19/2010 Spud Date: 5/23/2010 Project: UTAH-UINTAH Site: FEDERAL 1022-27H Rig Name No: GWS 1/1 **Event: COMPLETION** Start Date: 8/29/2010 End Date: 9/3/2010 Active Datum: RKB @5,458.01ft (above Mean Sea UWI: FEDERAL 1022-27H Level) Time Date Duration Sub MD From Code Operation Start-End Code (hr) (ft) 9/6/2010 7:00 33 7 AM FLBK REPORT: CP 1700#, TP 1075#, 20/64" CK, 13 BWPH, MED SAND, 1.4 GAS TTL BBLS RECOVERED: 3073 **BBLS LEFT TO RECOVER: 2197**

10/7/2010

9:37:47AM

Sundry Number: 1-6308 Approval of this: 43047500960000

Action is Necessary

	STATE OF UTAH		FORM 9	
	DIVISION OF OIL, GAS, AND MI		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0473	
SUND	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
Do not use this form for propo bottom-hole depth, reenter plu DRILL form for such proposals	sals to drill new wells, significantly deeper ugged wells, or to drill horizontal laterals. I	n existing wells below current Use APPLICATION FOR PERMIT TO	7.UNIT or CA AGREEMENT NAME:	
1. TYPE OF WELL Gas Well		8. WELL NAME and NUMBER: FEDERAL 1022-27H		
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONS	HORE, L.P.		9. API NUMBER: 43047500960000	
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th S	PHC Street, Suite 600, Denver, CO, 80217 3779	ONE NUMBER: 720 929-6515 Ext	9. FIELD and POOL or WILDCAT: NATURAL BUTTES	
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1597 FNL 1182 FEL			COUNTY: UINTAH	
QTR/QTR, SECTION, TOWNSHI Qtr/Qtr: SENE Section: 27	IP, RANGE, MERIDIAN: Township: 10.0S Range: 22.0E Meridian:	S	STATE: UTAH	
11. CHE	CK APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPORT,	OR OTHER DATA	
TYPE OF SUBMISSION		TYPE OF ACTION		
	ACIDIZE	☐ ALTER CASING	✓ CASING REPAIR	
Approximate date work will start:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	CHANGE WELL NAME	
7/5/2011	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE	
SUBSEQUENT REPORT	☐ DEEPEN	FRACTURE TREAT	☐ NEW CONSTRUCTION	
Date of Work Completion:	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK	
	☐ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION	
SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON	
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL	
☐ DRILLING REPORT	☐ WATER SHUTOFF	\square si ta status extension	☐ APD EXTENSION	
Report Date:	☐ WILDCAT WELL DETERMINATION	✓ OTHER	OTHER: Wellhead Repair	
12. DESCRIBE PROPOSED OR CO	DMPLETED OPERATIONS. Clearly show all pe	rtinent details including dates, depths, v	volumes, etc.	
l .	ts approval to conduct wellhe			
	ell location. Please find the att	•	Accepted by the	
propos	sed repair work on the subject	t well location.	Utah Division of	
			Oil, Gas and Mining	
		_		
		D	ate: 0/(11/2011	
		В	y: Ust Clut	
		5	·	
NAME (PLEASE PRINT) Gina Becker	PHONE NUMBER			
SIGNATURE	720 929-6086	Regulatory Analyst II DATE		
N/A		7/5/2011		

WORKORDER #: 88119326

Name: <u>FEDERAL 1022-27H</u> 7/1/2011

Surface Location: SENE Sec. 27, T10S, R22E

Uintah County, UT

API: 4304750096 **LEASE#:** UTU-473

ELEVATIONS: 5440' GL 5458' KB

TOTAL DEPTH: 8500' **PBTD:** 8452'

SURFACE CASING: 8 5/8", 28# J-55 @ 1884'

PRODUCTION CASING: 4 1/2", 11.6#, I-80 @ 8496'

TOC @ 100' per CBL (with min 50' isolation)

PERFORATIONS: Wasatch 4976' – 5967'

Mesaverde 6775' - 7875'

Tubular/Borehole	Drift	Collapse psi	Burst psi	Capacities			
	inches			Gal./ft.	Cuft/ft.		Bbl./ft.
2.375" 4.7# J-55 tbg.	1.901	8100	7700	0.1624		0.02171	0.00387
4.5" 11.6# I-80	3.875	6350	7780	0.6528		0.0872	0.0155
8.625" 28# J-55	8.097	1370	2950	2.6223		0.3505	0.0624
Annular Capacities							
2.375" tbg. X 4 ½" 11.6# csg		_		0.4227	0.0565		0.01

GEOLOGICAL TOPS:

1026' Green River 1306' Bird's Nest 1711' Mahogany 4011' Wasatch 6229' Mesaverde

FEDERAL 1022-27H- WELLHEAD REPAIR PROCEDURE

PREP-WORK PRIOR TO MIRU:

- 1. Dig out down to the 2" surface casing valve or to the valve on the riser off the surface casing.
- 2. Install a tee with 2 valves, with a pressure gauge and sensor on one valve.
- 3. Open casing valve and record pressures.
- 4. Install nipple and steel hose on the other valve, the relief valve,. Do not use hammer unions. No impact equipment or tools to be used for any of this installation. Extend hose and hard piping to a downwind location at least 100' from the wellhead. Consider installing a manifold so that vent area could be in two locations approx. 90 degrees apart from the wellhead.
- 5. Open the relief valve and blow well down to the atmosphere.
- 6. Make a determination of amount of gas flow, either by installation of a choke nipple, bucket test or other.
- 7. Shut well in. Observe for rate of build-up by utilizing sensor data. Do not build-up for more than 24 hours. Vent gas through the vent line and leave open to the atmosphere.

WORKOVER PROCEDURE:

- 1. MIRU workover rig.
- 2. Kill well with 10# brine / KCL (dictated by well pressure).
- 3. Remove tree, install double BOP with blind and 2 3/8" pipe rams, with accumulator closing unit and manual back-ups. Function test BOP system.
- 4. POOH w/ tubing laying down extra tubing.
- 5. Rig up wireline service. RIH and set CBP @ ~4926'. Dump bail 4 sx cement on top of plug. POOH and RD wireline service. TIH w/ tubing and seating nipple. Land tubing ±60' above cement. RDMO.
- 6. Monitor well pressures. If surface casing is dead. MIRU. ND WH and NU BOP. POOH w/ tubing.
- 7. Depending on conditions at wellsite, continue with either CUT/PATCH Procedure or BACK-OFF Procedure.

CUT/PATCH PROCEDURE:

- 1. PU internal casing cutters and RIH. Cut casing at +/- 30' from surface.
- 2. POOH, LD cutters and casing.
- 3. PU 7 3/8" overshot with 4 ½" right hand standard wicker grapple, 1 4 ¾" drill collar with 3 ½" IF threads, pup joint, manual bumper sub, and crossovers. If casing cut is deeper than ±30' utilize >7000 ft-lb torque pipe as needed. Pull a minimum of 10,000# to keep grapple engaged if cement top is high (<~900'). If cement top is low (>~900'), more weight will be required to put casing in neutral. Torque casing string to ±7000 ft-lbs, count number of turns to make-up, and document in the daily report. Ensure that tongs are safely anchored to rig and that all personnel are at a safe working distance from the tongs during torque-up and torque release. After initial make-up, place pipe torque to neutral and mark pipe. Place ±7000 ft-lbs on casing a second time, count turns, then return pipe torque to neutral and count turns. Repeat if torque-up turns do not equal torque release turns. Once torque-in equals torque-out, release overshot, POOH, and lay down.
- 4. TIH w/ skirted mill and dress off the fish top for approximately ½ hour. TOOH.
- 5. PU & RIH w/ $4\frac{1}{2}$ " 10k external casing patch on $4\frac{1}{2}$ " P-110 casing. Ensure that sliding sleeve assembly shifts ±3' and casing tags no-go portion of patch. NOTE: Shear pins will shear at 3500 to 4500 lbs.
- 6. Latch fish, PU to 100,000# tension. RU B&C. Cycle pressure test to 3500 psi.
- 7. Install slips. Land casing w/ 80,000# tension.
- 8. Cut-off and dress 4 ½" casing stub.
- 9. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~4876'. Clean out to PBTD (8452').
- 10. POOH, land tbg and pump off POBS.
- 11. NUWH, RDMO. Turn well over to production ops.

BACK-OFF PROCEDURE:

- 1. PU internal casing cutters and RIH. Cut casing at +/- 6' from surface.
- 2. POOH, LD cutters and casing.
- 3. PU 4 ½" overshot. RIH, latch fish. Pick string weight to neutral.
- 4. MIRU casing crew and wireline services. RIH and shoot string shot at casing collar @ ± 46'.
- 5. Back-off casing, POOH.

- 6. PU new casing joint with buttress threads and entry guide and RIH. Tag casing top. Thread into casing and torque up to ±7000 ft-lbs, count number of additional turns to make-up, and document in the daily report. Ensure that tongs are safely anchored to rig and that all personnel are at a safe working distance from the tongs during torque-up and torque release. After initial make-up, place pipe torque to neutral and mark pipe. Place ±7000 ft-lbs on casing a second time, count turns, then return pipe torque to neutral and count turns. Repeat if torque-up turns do not equal torque release turns. Once torque-in equals torque-out go to step 7.
- 7. PU 100,000# tension string weight. RU B&C. Cycle pressure test to 3500 psi.
- 8. Install slips. Land casing w/ 80,000# tension.
- 9. Cut-off and dress 4 ½" casing stub.
- 10. NUWH. PU 3 7/8" bit, POBS and RIH. D/O cement and plug ~4876'. Clean out to PBTD (8452').
- 11. POOH, land tbg and pump off POBS.
- 12. NUWH, RDMO. Turn well over to production ops.

STRENGTH DATA FOR LOGAN 5.88" OD "L" TYPE CSG PATCH 4-1/2 CASING, 10K PSI MAX WP 125K YIELD MAT'L LOGAN ASSEMBLY NO. 510L-005 -000



COLLAPSE PRESSURE: 11,222 PSI @ 0 TENSILE 8,634 PSI @ 220K TENSILE

Tensile Strength @ Yield: Tensile Strength w/ 0 Int. Press.= 472,791lbs. Tensile Strength w/ 10K Int. Press.= 313,748lbs.

DATA BY SLS 11/16/2009

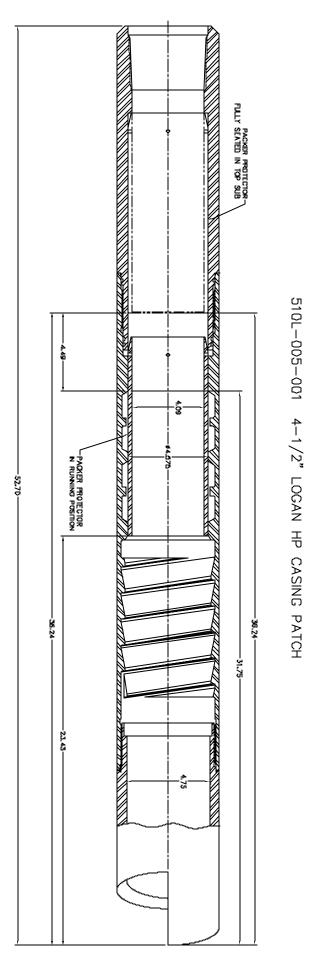


Logan High Pressure Casing Patches Assembly Procedure

All parts should be thoroughly greased before being assembled.

- 1. Install all four Logan Type "L" Packers in the spaces provided in the Casing Patch Bowl. Refer to diagram provided for proper installation.
- 2. Install Packer Protector from the Basket Grapple end of the Bowl. The beveled end of the Packer Protector goes in first. Carefully push the Packer Protector through the four Type "L" Packers.
- 3. Align Shear Pin Holes in Packer Protector so that the holes have just passed into the counter bore at the Top Sub end, refer to diagram. The Packer Protector is provided with four Shear Pin Holes. Use only two holes, 180 degrees apart and install the pins.
- 4. Screw the Basket Grapple in from the lower end of the Bowl, using left-hand rotation. The Tang Slot in the Basket Grapple must land in line with the slot in the Bowl.
- 5. Insert the Basket Grapple Control into the end of the Bowl. Align Tang on the Basket Grapple Control with the Tang Slot of the Bowl and Basket Grapple. This secures the Bowl and the Basket Grapple together.
- 6. Install the Cutlipped Guide into the lower end of the Bowl.
- 7. Install O-Rings on the two five-foot long Extensions. Screw the first Extension into the top end of the Bowl. Screw the second Extension into the top end of the first Extension.
- 8. Install O-Ring on Top Sub. Screw Top Sub into top end of second Extension.

Follow recommended Make-Up Torque as provided in chart.



STATE OF UTAH

SIAILO	UIAII
DEPARTMENT OF NAT	URAL RESOURCES
DIVISION OF OIL, G	SAS AND MINING

ENTITY ACTION FORM

perator:	1111111	McGEE OIL & GAS ON	Operator Account Number: N 2995					
ddress:	1368 S	OUTH 1200 EAST						
<u> </u>	city VE	RNAL						
<u> </u>	state U	Т	zip 84078		Р	hone Nu	mber: _	(435) 781-7024
Well 1								
API Num	ber	Well	Name	QQ	Sec	Twp	Rng	County
Variou	s	NBU REVISION						UINTAH
Action Co	ode	Current Entity Number	New Entity Number	S	pud Dat	te		tity Assignment Effective Date
E		Various	2900	;	3/13/201	2	ز	2/1/2012
Comments:	MOVI	E THE ATTACHED WE 12012. 72 W.C.	ELLS INTO THE NATI	JRAL BUT	TES UN	IT REVI	SION EF	731/3012
API Num	ber	Well	Name	QQ	Sec	Twp	Rng	County
Action Co		Current Entity Number	New Entity Number	s	pud Dat			tity Assignment Effective Date
Comments:	ode			S	pud Dat			
Action Co Comments: Well 3	ode :	Number		QQ	pud Dat			
Comments:	ode :	Number	Number	QQ		Twp	Rng	Effective Date

ACTION CODES:

A - Establish new entity for new well (single well only)

B - Add new well to existing entity (group or unit well)

C - Re-assign well from one existing entity to another existing entity

D - Re-assign well from one existing entity to a new entity

E - Other (Explain in 'comments' section)

RECEIVED

REGULATORY ANALYST

SHEILA WOPSOCK

Title

Signature

Name (Please-Print)

5/30/2012

Date

(5/2000)

MAY 3 1 2012

Entity Action Form Attachment for wells moved into the Natural Buttes Unit Effective 02/01/2012.

			orial e	untity			
	API	Well Name	QTR/QTŘ 1	Section	TWNSHP	RANGE	Producing Intervals
	4304737079	FEDERAL <u>92</u> 0-251	NESE 15	431 2	5 9S	20E	WASATCH/MESAVERDE
	4304737080	FEDERAL 920-25H	SENE 15'	161 2	5 9S	20E	WASATCH/MESAVERDE
	4304737081	FEDERAL 920-25A	NENE 15.	<i>553</i> 2	5 9\$	20E	WASATCH/MESAVERDE From MV
	4304739098	STATE 1021-28M	SWSW /6.	499 2	8 10S	21E	WASATCH TO WSTNVD
	4304737918	FEDERAL 1021-26L	NWSW 16	390 2	6 10S	21E	MESAVERDE TO WS TO VD
	4304737919	FEDERAL 1021-26N	SESW 16	391 2	6 10S	21E	WASATCH/MESAVERDE
	4304737916	FEDERAL 1021-250	SWSE //p	2772	5 10S	<u>21</u> E	WASATCH/MESAVERDE
	4304739112	STATE 1021-31M	SWSW 16	4543	1 105	21E	WASATCH TO WSTMVD
	4304739127	STATE 1021-32P	SESE /6	471 3	2 10S	21E	WASATCH/MESAVERDE
	4304739128	STATE 1021-320	SWSE 17	5/3 3	2 10S	<u>2</u> 1E	WASATCH/MESAVERDE
	4304739131	STATE 1021-32L	NWSW /6	902 3	2 10S	21E	WASATCH/MESAVERDE
	4304739133	STATE 1021-32J	NWSE /7	529 3	2 10S	21E	WASATCH/MESAVERDE
	4304739134	STATE 1021-32I	NESE 16	905 3	2 10S	21E	WSMVD
	4304739135	STATE 1021-32H	SENE 17	5283	2 10S	21E	WASATCH/MESAVERDE
	4304735714	FEDERAL 1022-29H	SENE /5	147 2	9 10S	22E	WASATCH/MESAVERDE
	4304735715	FEDERAL 1022-29F	SENW 15	1622	9 10S	22E	WASATCH/MESAVERDE
	4304735716	FEDERAL 1022-29B	NWNE //	782 2	9 10S		WASATCH/MESAVERDE
	4304735737	FEDERAL 1022-291	NESE 15		9 10S		WASATCH/MESAVERDE
	4304735738	FEDERAL 1022-29D	NWNW 13	016 2	9 105	22E	MESAVERDE TO WSTNVD
	4304734862	FEDERAL 31-10-22	SESE /2	<u> </u>	1 10S	22E	MESAVERDE TO WSTAVD
	4304735173	FEDERAL 1022-31D	NWNW /		1 10S		WASATCH/MESAVERDE
	4304736492	FEDERAL 1022-31N	SESW //	13553			WASATCH/MESAVERDE
	4304736493	FEDERAL 1022-311			1 10S		WASATCH/MESAVERDE
		FEDERAL 1022-31G	4		1 10S		WASATCH/MESAVERDE
		FEDERAL 1022-31F			1 10S		WASATCH/MESAVERDE
		FEDERAL 1022-31C		,	1 10S		WASATCH/MESAVERDE
		FEDERAL 1022-31J	NWSE /5		1 10S		WASATCH/MESAVERDE
		FEDERAL 1022-31L			1 10S		WASATCH/MESAVERDE
	4304734317	STATE 1-32	NESW /3/		2 10S		WASATCH/MESAVERDE
	4304734831	-		- , ,	2 10S		MESAVERDE TO WSMVD
	4304734832		NWSW 13		2 10S		WASATCH/MESAVERDE
		STATE 1022-32J			2 10S	22E	WSMVD
		STATE 1022-32A			2 10S		WASATCH/MESAVERDE
		STATE 1022-32P	SESE /H/		2 10S		MESAVERDE TO WSTNVD
		STATE 1022-320			2 10S		WASATCH/MESAVERDE
		STATE 1022-32H	SENE 14		2 10S		MESAVERDE TO WSMVD
		STATE 1021-360	SWSE / 56		6 10S		WASATCH/MESAVERDE
ı		WELL BELONGS TO					and the second of the control of the
•	tale to the first term of the	FEDERAL 1022-15F		1.00	5 10S		WASATCH/MESAVERDE
		STATE 1021-36J			6 10S	21E	WASATCH/MESAVERDE
		STATE 1021-36L		<i></i>	6 10S	21E	WASATCH/MESAVERDE
		FEDERAL 1022-15J		-10	5 10S	22E	WASATCH/MESAVERDE
		STATE 1021-36I			6 10S	21E	WASATCH/MESAVERDE
		STATE 1021-36D			6 10S	21E	WASATCH/MESAVERDE
	100 17 000-10	J 1021 JOD	10	<u> </u>			and the state of t

4304750096 FEDERAL 1022-27H	SENE 17626	27 10S	22E	WASATCH/MESAVERDE
4304736416 STATE 1021-36H	SENE 15335	36 10S	21E	WASATCH/MESAVERDE
4304738846 STATE 1021-36E	SWNW 16523	36 10S	21E	WASATCH/MESAVERDE
4304735676 FEDERAL 1022-28L	NWSW 15110	28 10S	22E	WASATCH/MESAVERDE
4304736417 STATE 1021-36G	SWNE 15291	36 10S	21E	WASATCH/MESAVERDE
4304738847 STATE 1021 <u>-36F</u>	SENW 16394	₹36 10S	21E	WASATCH/MESAVERDE
4304735713 FEDERAL 1022-28N	SESW 15145	28 10S	22E	WASATCH/MESAVERDE
4304736418 STATE 1021-36B	NWNE 14953	36 10S	21E	WASATCH/MESAVERDE
4304738848 STATE 1021-36N	SESW 16359	36 10S	21E	WASATCH/MESAVERDE
4304735735 FEDERAL 1022-280	SWSE 15285	28 10S	22E	WASATCH/MESAVERDE From MURD
4304736419 STATE 1021-36A	NENE 15035	36 10S	21E	WASATCH/MESAVERDE
4304738849 STATE 1021-36K	NESW 16084	36 10S	21E	WASATCH/MESAVERDE
4304735736 FEDERAL 1022-28M	swsw 15286	28 10S	22E	WASATCH/MESAVERDE
4304736420 STATE 1021-36P	SESE 15372	36 10S	21E	WASATCH/MESAVERDE
4304738850 STATE 1021-36C	NENW /6396	36 10S	21E	WASATCH/MESAVERDE
4304734861 FEDERAL 29-10-22	SESE 14006	29 10S	22E	MESAVERDE TO WSMVD
4304735577 FEDERAL 1022-330	SWSE 15080	33 10S	22E	WASATCH/MESAVERDE
4304735739 FEDERAL 1022-33E	SWNW 15193	33 10S	22E	WASATCH/MESAVERDE
4304735740 FEDERAL 1022-33M	swsw /5373	33 10S	22E	WASATCH/MESAVERDE
4304735741 FEDERAL 1022-33L	NWSW /5511	33 10S	22E	WASATCH/MESAVERDE
4304735742 FEDERAL 1022-33G	SWNE 15404	33 10S	22E	WASATCH/MESAVERDE From MURD
4304735743 FEDERAL 1022-33C	NENW 15405	33 10S	22E	WASATCH/MESAVERDE
4304735744 FEDERAL 1022-33A	NENE /5539	33 10S	22E	WASATCH/MESAVERDE
4304737105 FEDERAL 1022-33D	NWNW 16502	33 10S	22E	WASATCH/MESAVERDE
4304737106 FEDERAL 1022-33F	SENW 16560	33 10S	22E	WASATCH/MESAVERDE From WSTC
4304737107 FEDERAL 1022-33K	NESW 16124	33 10S	22E	WASATCH/MESAVERDE
4304737109 FEDERAL 1022-33N	SESW /6/26	33 10S	22E	WASATCH/MESAVERDE
4304737110 FEDERAL 1022-33B	NWNE /6561	33 1 0S	22E	WASATCH/MESAVERDE
4304735810 STATE 1021-36E	SWNW 14395	36 10S	21E	WASATCH/MESAVERDE

Sundry Number: 27806 API Well Number: 43047500960000

	STATE OF UTAH			FORM 9
ı	DEPARTMENT OF NATURAL RESOUI DIVISION OF OIL, GAS, AND M		3	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0473
SUNDR	RY NOTICES AND REPORTS	S ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	oposals to drill new wells, significant reenter plugged wells, or to drill horiz n for such proposals.			7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES
1. TYPE OF WELL Gas Well				8. WELL NAME and NUMBER: FEDERAL 1022-27H
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	ISHORE, L.P.			9. API NUMBER: 43047500960000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	h Street, Suite 600, Denver, CO, 802		NE NUMBER: 9 720 929-6	9. FIELD and POOL or WILDCAT: 5M&TUTRAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1597 FNL 1182 FEL				COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 7 Township: 10.0S Range: 22.0E Mer	ridian: S	3	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO INDIC	ATE N	ATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACTION	
	ACIDIZE		ALTER CASING	✓ CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS		CHANGE TUBING	CHANGE WELL NAME
Approximate date work will start.	CHANGE WELL STATUS		COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	□ F	RACTURE TREAT	☐ NEW CONSTRUCTION
9/16/2011	OPERATOR CHANGE		PLUG AND ABANDON	PLUG BACK
SPUD REPORT	PRODUCTION START OR RESUME		RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION	_	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON
	TUBING REPAIR		ENT OR FLARE	WATER DISPOSAL
DRILLING REPORT Report Date:	WATER SHUTOFF		SI TA STATUS EXTENSION	APD EXTENSION
Report Date.			STATUS EXTENSION	AFDEATENSION
	WILDCAT WELL DETERMINATION		OTHER	OTHER:
The operator has co	COMPLETED OPERATIONS. Clearly shoon cluded the wellhead/casise see that attached chrono of the operations.	ing re	pairs on the subject	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY July 18, 2012
NAME (DI EASE DDINIT)	DUONE NIIA	ARED	TITI E	
NAME (PLEASE PRINT) Jaime Scharnowske	PHONE NUN 720 929-6304	//BER	TITLE Regulartory Analyst	
SIGNATURE N/A			DATE 7/17/2012	

RECEIVED: Jul. 17, 2012

				U	S ROC	KIES RI	EGION	
				Opera	tion S	Summa	ry Report	
Well: FEDERAL	1022-27H		Spud Co	nductor: 5	5/19/2010)	Spud Date: 5/2	23/2010
Project: UTAH-l	JINTAH		Site: FED	DERAL 10	22-27H			Rig Name No: LEED 698/698
Event: WELL W	ORK EXPENSE		Start Dat	e: 9/14/20	111			End Date: 9/16/2011
Active Datum: R	KB @5,458.00	ısft (above Mean Se		1		1022-27H		
Date	Time Start-En	Duration d (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
9/14/2011	7:00 - 9:	00 2.00	ALL	30	G	Р		ROAD RIG & TRAVEL F/ NBU 1022-4J TO FEDERAL 1022-27H
	9:00 - 10	1.00	ALL	30	Α	Р		MIRU
	10:00 - 11		ALL	30	F			BLEW TBG DWN, CONTROL TBG W/ 10 BBLS, ND WH, NU BOP'S, RU FLOOR & TBG EQUIPMENT, UNLAND TBG HANGER.
	11:00 - 13		ALL	31	I			POOH W/ 240 JTS J-55 TBG, LD 4 JTS W/ SCALE, LD XN
	13:30 - 15	1.50	ALL	34	I			RU J-W WIRELINE COMPANY, RIH & SET CIBP @4935', POOH TOOLS, RD J-W WIRELINE COMPANY, FILL CSG W/ T-MAC, P.T. PLUG TO 3000 PSI. SWI, SDFN.
9/15/2011	6:45 - 7:	0.25	ALL	48		Р		JSA, CUT CSG, BACK-OFF PROCEDURE
	7:00 - 7:	30 0.50	ALL	47	Α	Р		RD FLOOR & TBG EQUIPMENT, ND BOP'S, ND CSG BOWL, RU PWR SWVL
	7:30 - 8:	30 1.00	ALL	31	В	Р		PU INTERNAL CSG CUTTERS & RIH, CUT CSG @ 3' F/SURFACE, POOH & LD CUTTER & CSG MANDRAL, RD PWR SWVL, PU 4-1/2 OVERSHOT, RIH, LATCH FISH, RU CSG CREW & WIRELINE SERVICES, RIH & STRING SHOT CSG COLLAR, BACK-OFF CSG, POOH, PU NEW 10' CSG PUP & RIH TAG CSG TOP, THREAD INTO CSG, TORQUE CSG TO 7000# W/22-1/4 ROTATIONS ON CSG, PU 4-1/2 CSG TO 85,000# TENSION.
	8:30 - 9:	45 1.25	ALL	33	С	Р		RU B&C QUICK TEST, P.T. 4-1/2 CSG TO 1000 PSI. FOR 15 MINS, LOST 11.25 PSI. IN 15 MINS, P.T. 4-1/2 CSG TO 3500 PSI. FOR 30 MINS, LOST 53.75 PSI. IN 30 MINS, RD B&C QUICK TEST.
	9:45 - 11		ALL	47	С	Р		SET C-21 SLIPS, LAND CSG W/ 85,000# TENSION, CUT-OFF & DRESS 4-1/2 CSG STUB, INSTALL FLANGE & CROSSOVER SPOOL, TORQUE ALL 1-7/8 BOLTS, NU CSG BOWL, NU BOP'S, RU FLOOR & TBG EQUIPMENT.
	11:00 - 12		ALL	31	I	Р		PU 3-7/8 MILL & RIH 157 JTS. 2-3/8 J-55 TBG, TAG CIBP @ 4935"
	12:15 - 12		ALL	47	Α	Р		RU PWR SWVL, RU TECH FOAM, EST CIRC IN 15 MINS
	12:45 - 13		ALL	44	С	Р		D/O CIBP @ 4935' IN 15 MINS, HAD 50 PSI. INCREASE, KILL TBG, LD PWR SWVL.
	13:15 - 16	2.75	ALL	31	I			RIH W/ TBG & PU 17 JTS. 2-3/8 J-55 TBG F/ TRAILER, TO 7998', CIRC WELL CLEAN, POOH LD 13 JTS ON TRAILER,SDFN.
9/16/2011	6:45 - 7:	00 0.25	COMP	48		Р		HSM. SAND LINE SAFETY.

1/24/2012 12:31:42PM 1

Well: FEDERAL 1022-27H Spud Conductor: 5/19/2010	
Project: UTAH-UINTAH Event: WELL WORK EXPENSE Active Datum: RKB @5,458.00usft (above Mean Sea Level) Date Time Start Date: 9/14/2011 UWI: FEDERAL 1022-27H UWI: FEDERAL 1022-27H Code Sub P/U Code	Rig Name No: LEED 698/698
Start Date: 9/14/2011	
Active Datum: RKB @5,458.00usft (above Mean Sea UWI: FEDERAL 1022-27h- Level) Date Time Duration Phase Code Sub P/U Start-End (hr) Code	End Date: 9/16/2011
Date Time Duration Phase Code Sub P/U Start-End (hr) Code	
Start-End (hr) Code	Н
7:00 - 15:00 8.00 COMP 31 I P	MD From Operation (usft)
	SITP = 500 PSI. SICP = 600 PSI. OPEN WELL, BLOW WELL DOWN T/ FBT. POOH W/ 240 JTS 2 3/8 J-55 TBG. LD BIT SUB & 3 7/8 MILL. X-OVER TBG EQUIP. PU 1.875 XN-NIPPLE. RIH W/ 120 JTS TBG. RU SWAB EQUIP. PU 1.901 BROACH. RIH BROACH TBG T/ 3799'. TAG XN-NIPPLE. POOH W/ BROACH. STD BK SWAB EQUIP. CONT RIH W/ 120 JTS TBG. PU 4 1/16 TBG HNGR. LAND TBG. BROACH TBG T/ 4500'. POOH. RD SWAB EQUIP. ND BOP. NU WELL HEAD. SWI FOR PSI BUILD UP. RD RIG. RACK OUT RIG EQUIP. ROAD RIG T/ NBU 1022-27A. MIRU RIG SPOT EQUIP. CALL CDC T/ CATCH PLUNGER EQUIP & SELL WELL DOWN OVER WEEKEND. LAND TBG W/ KB = 18' 4 1/16 TBG HNGR = .83 240 JTS J-55 TBG = 7579.94 1.875 XN-NIPPLE = 1.05 EOT @ 7599.82 TOTAL FUILD PUMP ON JOB =220 BBL. RIG RECOVERD = 175 BBL

1/24/2012 12:31:42PM 2

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STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM

Operator:

KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address:

P.O. Box 173779

city DENVER

zip 80217 state CO

Phone Number: (720) 929-6100

Weil 1

API Number	Well	Name	QQ	Sec	Twp	Rng	County
4304750098	NBU 1022-2	?7A	NENE	27	108	22E	UINTAH
Action Code	Current Entity Number	New Entity Number	Spud Date		Entity Assignment Effective Date		
В	99999	2900	5	5/19/201	0	6/4	1 /10

SPUD WELL LOCATION ON 5/19/2010 AT 09:00 HRS.

Well 2

API Number	Well Name FEDERAL 1022-27H		QQ	Sec	Twp	Rng	County	
4304750096			SENE	27	108	22E	UINTAH	
Action Code	Current Entity Number	New Entity Number	Spud Date		te		tity Assignment Effective Date	
A	99999	17626	5	5/19/201	0	6/	7/10	
omments:		1.50-01	//			/		

MIRU PETE MARTIN BUCKET RIG. ω 5701V5 SPUD WELL LOCATION ON 5/19/2010 AT 14:00 HRS.

Well 3

API Number	Well I	Name	QQ	Sec	Twp	Rng	County
Action Code	Current Entity Number	s	pud Da	te		ity Assignment iffective Date	
Comments:							

ACTION CODES:

- A Establish new entity for new well (single well only)
- B Add new well to existing entity (group or unit well)
- C Re-assign well from one existing entity to another existing entity
- D Re-assign well from one existing entity to a new entity
- E Other (Explain in 'comments' section)

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A	NI	ìΥ	1	YΤ	LE

Name (Please Print)

Title

REGULATORY ANALYST

5/20/2010

Date

	STATE OF UTAH			FORM 9
ı	DEPARTMENT OF NATURAL RESC DIVISION OF OIL, GAS, AND		i	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-0473
SUNDR	Y NOTICES AND REPOR	TS ON	WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
Do not use this form for procurrent bottom-hole depth, FOR PERMIT TO DRILL form	7.UNIT or CA AGREEMENT NAME: NATURAL BUTTES			
1. TYPE OF WELL Gas Well				8. WELL NAME and NUMBER: FEDERAL 1022-27H
2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ON	NSHORE, L.P.			9. API NUMBER: 43047500960000
3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th	h Street, Suite 600, Denver, CO, 8		NE NUMBER: 9 720 929-6	9. FIELD and POOL or WILDCAT: 456ATURAL BUTTES
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1597 FNL 1182 FEL				COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SENE Section: 2	HIP, RANGE, MERIDIAN: 7 Township: 10.0S Range: 22.0E M	leridian: S	3	STATE: UTAH
11. CHECI	K APPROPRIATE BOXES TO IND	ICATE NA	ATURE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACTION	
	CHANGE TO PREVIOUS PLANS CHANGE WELL STATUS DEEPEN OPERATOR CHANGE ✓ PRODUCTION START OR RESUME REPERFORATE CURRENT FORMATION TUBING REPAIR WATER SHUTOFF WILDCAT WELL DETERMINATION COMPLETED OPERATIONS. Clearly SI 1022-27H Well Was retu 11/17/2016. Thank y	C C C C C C C C C C C C C C C C C C C		CASING REPAIR CHANGE WELL NAME CONVERT WELL TYPE NEW CONSTRUCTION PLUG BACK RECOMPLETE DIFFERENT FORMATION TEMPORARY ABANDON WATER DISPOSAL APD EXTENSION OTHER: Pepths, volumes, etc. Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY NOVEMBER 29, 2016
NAME (PLEASE PRINT)	PHONE N	UMBER	TITLE	
Candice Barber SIGNATURE	435 781-9749		HSE Representative	
N/A			11/22/2016	